Department of Mines and Explosives, Mysore State.

REPORT

OF THE

Chief Inspector of Mines in Mysore

including the Explosives Section

FOR THE YEAR

1931-32

With Statistics for the Calendar Year 1931.

BANGALORE:
PRINTED AT THE GOVERNMENT PRESS
1932

Price Rupees Two

Government of his highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS.

G. O. No. D. 2498-508—Geol. 36-32-3, dated 2nd December 1932.

Administration Report of the Department of Mines and Explosives.

Reviews the —— for the year 1931-32.

READ—

Letter No. 497, dated 15th September 1932, from the Chief Inspector of Mines, submitting the Administration Report of the Department of Mines and Explosives for the year 1931-32.

ORDER No. D. 2498-508—GEOL. 36-32-3, DATED BANGALORE, THE 2ND DECEMBER 1932.

Recorded.

2. *Personnel.*—Mr. C. E. Suryanarayana Rao continued as Chief Inspector of Mines in the year under report.

3. *Mining and Prospecting.*—The following statement shows the number of leases, licenses and certificates of approval current in the year under report as compared with those current in the previous year:—

	1930-31.	1931-32.
Mining leases	42	40
Prospecting licenses	9	9
Collecting licenses . ..	3	6
Exploring licenses	..	..
Certificates of approval ..	13	14
Total ..	67	69

The total area under mining leases and prospecting licenses was 26,311 acres and the total rents and cesses recovered in respect of them amounted to Rs. 16,866. The total number of mining leases for gold was 21, the same as in the previous year.

4. *Gold Mining.*—Mining operations were in progress in the five blocks on the Kolar Gold Fields as in the previous year. The Balaghat Block worked by the Balaghat Gold Mines, Ltd., was assigned to the Nundydroog Mines, Ltd., with effect from 1st May, 1932 for £40,000. After deducting royalty and other charges from the net sale proceeds of the bullion recovered from the mine, the remaining profit is divided in the ratio of 75 per cent to the Balaghat Mines, Ltd., and 25 per cent to the Nandydroog Mines, Ltd. The nominal and the paid up capital of all companies carrying on operations in Mysore, remained the same as in the past year, *viz.*, £1,717,000 and £1,667,737, respectively. The total quantities of fine gold and silver produced during the calendar year 1931 amounted to 330,434·024 ozs. and and 22,604·850 ozs., respectively, as against 329,133·876 ozs. and 17,843·988 ozs. during the previous year. The total value of fine gold and silver produced amounted to £ 1,560,739-10-4 as against £1,396,145-14-4 (revised) in 1930 showing an increase of £164,593-16-0 due to high price of gold prevailing in the market and to the small increase of production. The total amount paid in dividends was £219,010-16-0 as against £179,000-0-0, showing an increase of £40,010-16-0. The royalty payable to Government on the gold and silver won and dividends paid amounted to £83,094-0-4 as against £74,060-6-11 (revised) in the previous year, showing an increase of £9,033-13-5. Calculated in Indian currency, the total demand on account of royalty payable to Government on gold and silver for the calendar year 1931, including the balance due for the previous year amounted to Rs. 14,44,081-3-0 out of which Rs. 11,06,720 was collected, leaving a balance of Rs. 3,37,361-3-0.

No. D. 2498-508—Geol. 36-32-3, dated 2nd December 1932.

5. *Position of the Mines.*—The estimated total ore reserves of all the mines at the end of the year 1931 show a decrease of 62,623 tons against a decrease of 127,106 tons at the end of 1930.

The Champion Reef and Oorgaum Mines have reached a vertical depth of over 7,100 feet below the field datum. All possible arrangements are being made to ensure an adequate supply of fresh air to all the working places. All the new shafts and winzes which serve as airways are smoothlined in brick or concrete not only to minimise the effects of rock-bursts but also to reduce friction and electrically driven fans have been erected in the course of the main airways to aid the circulation of air currents. The question of providing adequate ventilation in deep mines which is a very difficult problem is reported to be engaging the attention of the management. The rescue station, as usual, is being maintained in an efficient condition. Since the occurrence of the disastrous fire in the Nundydroog Mine in May 1931, certain additional precautions have been taken by providing refuge stations with compressed air jets at suitable places. The 'safety first' campaign is being carried on vigorously as usual. In addition to this, the 'scout movement' which has recently been organised is spreading rapidly amongst the workmen making them more effecient, self-reliant and resourceful.

6. *Other Minerals.*—The following statement shows the output and other particulars of minerals other than gold worked during the year :—

Name of mineral	Output	Quantity removed from block	Royalty payable
	Tons	Tons	Rs. a. p.
Manganese	527·25	5,092·55	2,273 3 4
Chromite	4,000·45 (34·25 concentrated.)	7,017·55	6,442 11 7
Magnesite	335	1,486	1,760 0 0 (dead-rent.)
Kaolin	2,242·45	2,242·45	1,813 13 0
	28	28	28 0 0
Soapstone	100	100	175 0 0
Green quartzite	1·07	....	....

7. *Mining Revenue.*—The total demand under mining revenue, other than royalty on gold, for the year 1931-32 was Rs. 76,816-8-0 and out of this, a sum of Rs. 76,627-3-7 was collected leaving a balance of Rs. 189-4-5 to be recovered.

8. *Inspection of Mines.*—Owing to the increasing depths of mines in the Kolar Gold Fields, inspection work is becoming more arduous and exacting. In addition to the numerous inspections connected with accidents, all the mines were systematically inspected and no serious lapses of the Mining Rules were noticed. Enquiries into all fatal and serious accidents and trivial ones in which a breach of the rules were reported or suspected have been held. Examination for the grant of certificates of maistries, blasters and engine drivers, (first and second class) was conducted by the Department once a week. In all, 372 candidates were examined and 82 duplicate tickets (discs) were issued, the original having been lost by the applicants during the year. The examination fees realised amounted to Rs. 1,713-9-0 against Rs. 2,583-9-0 in the previous year, the decrease being due to less number of candidates examined. Under standing orders, the annual inspection of the books and accounts of the Oorgaum Gold Mining Company of India, Ltd., was conducted by the Comptroller in association with the Chief Inspector of Mines.

Some blocks, outside the Kolar Gold Fields were inspected during the year in Kolar, Mysore, Tumkur, Hassan and Shimoga Districts. The slump in the world's markets for the two important base metals of the State, *viz.*, Manganese and Chromium, continues to be the same as in the previous year. The United Steel Companies, Ltd., Workington Iron and Steel Branch, Shimoga and the Peninsular Minerals Company, Ltd., have, owing to trade depression, both surrendered their leases The Chrome Ore Industry of the State has also received a serious check. Most of the chrome mining.

concerns have suspended operations except at Sinduvalli Mine. The workings in most of the other blocks were generally satisfactory.

9. *Mining Labour.*—The total number of persons employed in the mining industry in 1931 was 19,109 as against 18,925 in the previous year. Of the 18,388 persons employed in Gold Mining, 341 were Europeans, 400 Anglo-Indians and 17,647 Indians, as many as 9,954 persons being employed below ground and 8,434 on surface. The relationship between the employer and the employee is reported to be satisfactory. The report of the Special Officer appointed by Government to enquire into the Labour conditions on the Kolar Gold Fields has since been published and many of the recommendations made in it have already been given effect to and other points are engaging the attention of the Mine management. All the five mines have had a welfare policy for their employees but early last year, it was decided to entrust all welfare work on the Field to a Central Committee under the supervision of a European welfare officer. Each mine has a Welfare Committee consisting of the Superintendent of the Mine with eight others, both Indian and European workers. Housing, improvement in living conditions, sanitation, facilities for bathing and washing, lighting, day and night schools, recreation halls, organisation of lectures on temperance, domestic economy, thrift, hygiene, etc., scouting, laying out parks and play grounds, games, electric gramaphones and maternity and child welfare are some of the subjects in which these welfare committees are interested. Government are glad to note the action taken by the Mining Companies for the welfare of the labourers by introducing various measures for the amelioration of their condition.

10. *Accidents.*—The total number of accidents reported during the year was 200 against 186 in the previous year. Of these accidents, 35 were fatal, 160 serious and 5 non-mining. All the 195 mining accidents were enquired into and 22 were found to be due to negligence, 10 to recklessness and 163 were classed as unavoidable as against 14, 12 and 158, respectively, in the previous year. The death rate in the Gold Mines in the year 1931 was 7·12 per 1,000 as against 2·31 per 1,000 in 1930, the abnormally high rate being due to the disastrous fire accident in the Nundydroog Mine. Out of 35 fatal accidents, 15 were due to rock-bursts resulting in the death of 59 persons. It is reported that, in spite of precautions taken, the accidents continue to occur followed by heavy fatalities. It was, therefore, felt necessary to make a thorough investigation into the causes of rock-bursts and Government accordingly approved of a special Committee being constituted to go into the question for suitable measures being adopted for their prevention. Their report is awaited.

11. *Compensation for Injuries.*—During the year under review, 143 claims for compensation were settled by the Mining Companies and the compensation awarded in fatal cases and cases of permanent total disablement and permanent partial disablement amounted to Rs. 1,17,984-8-0 as against Rs. 88,441-15-0 during the previous year. Besides the above, compensation amounting to Rs. 13,360-1-0 was paid in cases of temporary disablement as against Rs. 17,411-15-0 in the previous year.

12. *Prosecutions*—Forty-four persons involved in 37 cases were prosecuted in connection with the theft and illegal possession of mining materials and of these, 40 were convicted. Fifteen cases were also dealt with for breach of rules, accidents, etc.

13. *Explosives.*—During the year, 703 licenses were granted under the Mysore Explosives Rules as against 747 during the previous year, showing a decrease of 44 licenses. Twelve reports of inspection of Government magazines in charge of Civil Officers were received in the Chief Inspector's Office as against 15 reports of inspection in the previous year and irregularities and defects requiring the adoption of remedial measures have been brought to the notice of the officers concerned. The total number of inspections of explosives premises carried out by the Magistracy and the Police was 651 against 529 during the previous year. Government note with satisfaction the marked progress in the inspection of explosives premises during the year under report and wish to reiterate the necessity for the systematic inspection of all these premises in future. There were 19 cases of prosecution under the Mysore Explosives Rules during the year as against 16 in the previous year. Sixty-five accidents due to explosives involving the death of 15 persons and serious and trivial injuries to 79 others were reported during the calendar year 1931 as against 58 accidents resulting in the death of 14 persons and injuries to 76 others in the previous year.

No. D. 2498-508—Geol 36-32-3, dated 2nd December 1932.

14. *Special Rules for Small Mines.*—Government have, in their order dated 28th June 1932, sanctioned a set of Special Rules framed under the Mysore Mines Regulation to govern small mines worked on the open cast system or by other methods for the prevention of accidents.

General.—The work of the Department during the year was satisfactory.

S. ABDUL WAJID,
Secretary to Government,
Development Department.

To—The Chief Inspector of Mines.
The Officiating Director of Geology in Mysore.
The District Magistrates of Districts.
The Inspector-General of Police in Mysore.

Exd—c. k.

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CONTENTS.

PAGE

A.—STATEMENTS OF LEASES AND LICENSES CURRENT AT THE CLOSE OF THE YEAR 1931-32—

(a) MINING LEASES ... 1
(b) PROSPECTING LICENSES ... 2
(c) COLLECTING LICENSES ... 2
(d) EXPLORING LICENSES ... 2
(e) SUMMARY ... 2

B.—GOLD MINING—

I. GOLD PRODUCTION, DIVIDENDS AND ROYALTY FOR THE CALENDAR YEAR 1931 ... 3

II. TOTAL GOLD PRODUCTION, DIVIDENDS AND ROYALTY FROM 1882 TO THE END OF 1931 ... 4

III. STATEMENT SHOWING THE AMOUNT OF ROYALTY PAYABLE TO GOVERNMENT, THE AMOUNT PAID AND THE BALANCE STILL DUE FOR THE YEAR 1931 (GOLD) ... 5
(SILVER) ... 5

IV. GOLD PRODUCTION FOR THE SIX MONTHS ENDING 30TH JUNE 1932 ... 5

V. NUMBER OF MINES ... 6

VI. NOTES ON MINES—
MYSORE MINE ... 8
CHAMPION REEF MINE ... 9
OOREGUM MINE ... 9
NUNDYDROOG MINE ... 10
BALAGHAT MINE ... 11
PENSAMUDRA MINE ... 11
SHINDUVALLI MINE ... 11

VII. ELECTRIC POWER SUPPLY—
(a) CAUVERY SYSTEM ... 12
(b) KOLAR MINES POWER STATION, LTD. ... 12

C.—MANGANESE, CHROMITE, MAGNESITE, KAOLIN, SOAPSTONE, CORUNDUM, GREEN QUARTZITE, KYANITE, STAUROLITE, GARNET, ASBESTOS AND MICA—

1. MANGANESE ... 14
2. CHROMITE ... 14
3. MAGNESITE ... 14
4. KAOLIN ... 15
5. SOAPSTONE ... 15
6. CORUNDUM ... 15
7. GREEN QUARTZITE ... 15
8. KYANITE, STAUROLITE AND GARNET ... 15
9. ASBESTOS AND MICA ... 15

STATEMENT SHOWING THE DEMAND, COLLECTION AND BALANCE OF ROYALTY ON MINERALS OTHER THAN GOLD DURING THE YEAR 1931-32 ... 15

PAGE

D.—OFFICIAL DUTIES, 1931-32 16

I. INSPECTION OF MINES 16

II. LABOUR EMPLOYED 17

III. ACCIDENTS—

(a) STATISTICS FOR THE YEAR 1931 19

(b) COMPENSATION FOR FATAL AND SERIOUS ACCIDENTS IN MINES ON THE KOLAR GOLD FIELD FOR THE YEAR 1931-32 20

(c) NOTES ON ACCIDENTS DURING THE OFFICIAL YEAR 1931-32 ... 21

IV. METEOROLOGY AND SEISMOLOGY ON THE KOLAR GOLD FIELD ... 24

V. UNDERGROUND AIR TEMPERATURES 25

VI. PROSECUTIONS—

(a) IN CONNECTION WITH THEFTS, ETC., OF MINING MATERIALS ... 29

(b) IN CONNECTION WITH BREACH OF RULES, ACCIDENTS, ETC. ... 29

E.—EXPLOSIVES SECTION—INSPECTION OF EXPLOSIVES MAGAZINES AND PREMISES 30

STATISTICAL TABLES—

Table 1.—CAPITAL EMPLOYED, RETURNS, ETC.

" **2.**—MACHINERY AND PLANT—SPECIFICATION No. 1.

" **3.**— DO DO No. 2.

" **4.**—WORK DONE AND NUMBER OF PERSONS EMPLOYED.

" **5.**—QUANTITIES AND COST OF MATERIALS CONSUMED AND WAGES PAID.

" **6.**—GOLD PRODUCTION AND WORKING COSTS.

" **7.**—CLASSIFICATION OF FATAL AND SERIOUS ACCIDENTS.

" **8.**—NUMBER OF FATAL AND SERIOUS ACCIDENTS PER 1,000 PERSONS.

" **9.**—NUMBER OF PERSONS KILLED IN ACCIDENTS.

" **10.**—NUMBER OF PERSONS SERIOUSLY INJURED IN ACCIDENTS.

" **11.**—COMPARATIVE TABLE OF MORTALITY, ETC., IN GOLD MINES IN MYSORE AND IN THE TRANSVAAL.

" **12.**—LIST OF MINING PROPERTIES LEASED, ASSIGNED OR ABANDONED DURING THE YEAR.

" **13.**—RECORD OF FATAL AND SERIOUS ACCIDENTS (*Mining*).

" **13A.**— DO DO (*Non-mining*).

APPENDIX I.—NOTES ON THE ADMINISTRATION OF THE WORKMEN'S COMPENSATION REGULATION ON THE KOLAR GOLD FIELD FOR THE YEAR 1931-32.

" **II.**—ACCIDENTS FROM EXPLOSIVES FOR THE YEAR 1931.

" **III.**—LIST OF AUTHORISED EXPLOSIVES.

" **IV.**—EXTRACTS FROM THE REPORT ON THE WORKING OF THE KOLAR GOLD FIELD POLICE FOR THE OFFICIAL YEAR 1931-32.

" **V.**—EXTRACTS FROM THE ADMINISTRATION REPORT OF THE KOLAR GOLD FIELD SANITARY BOARD FOR THE OFFICIAL YEAR 1931-32.

REPORT

OF THE

CHIEF INSPECTOR OF MINES IN MYSORE

FOR THE YEAR 1931-32.

A.—MINING AND PROSPECTING.

(1) CERTIFICATES OF APPROVAL.

There were 14 of these current during the year under report. Four of them were newly issued and the rest renewed.

(2) LEASES AND LICENSES.

The following statements show the numbers of leases and licenses in force during the year 1931-32 as compared with the previous year :—

(a) Mining Leases.

Mineral	District	1930-31	1931-32
1. Gold	Kolar	21	21
2. Manganese	Shimoga	2	2
Do	Chitaldrug	4	2
Do	Tumkur	3	3
3. Chromite	Mysore	2	2
Do	Hassan	5	5
4. Magnesite	Mysore	3	3
5. Kaolin	Kolar	1	1
Do	Kolar and Bangalore ...	1	1
	Total ...	42	40
	Decrease ...	...	2

(b) Prospecting Licenses.

Mineral	District	1930–31	1931–32
Manganese	Shimoga	4	2
	Chitaldrug	1	1
	Total ...	5	3
Kaolin or China Clay	Kolar	2	2
	Total ...	2	2
Kyānite and Staurolite	Hassan	2	2
	Total ...	2	2
Asbestos and Mica	Hassan	...	1
	Total ...	...	1
Green Stone	Kadur	...	1
	Total ...	...	1
	Grand Total ...	9	9

District Abstract.

	1930–31.	1931-32.
Kolar	2	2
Hassan	2	3
Shimoga	4	2
Kadur	...	1
Chitaldrug	1	1
Total ...	9	9

(c) Collecting Licenses.

During the year under report there were four licenses current for soapstone and two for corundum as hereunder:—

Mineral.	District.	Number.
Soapstone ...	Tumkur ...	4
Corundum ...	Mysore ...	1
Do ...	Kolar ...	1
	Total ...	6

(d) Exploring Licenses.

There were no exploring licenses current during the year:—

(e) Summary.

The following statement shows the number of leases, licenses and approval certificates current in the year under report as compared with those current in the previous year:—

	1930–31	1931–32
1. Mining leases	42	40
2. Prospecting licenses	9	9
3. Collecting licenses	3	6
4. Exploring licenses	...	...
5. Certificates of approval	13	14
Total ...	67	69

Total area under mining leases and prospecting licenses ... 26,311 acres.
Total rents with cesses recovered in respect of mining and prospecting blocks ... ... Rs. 16,866.

B.—GOLD MINING.

I. Gold Production, Dividends and Royalty for the calendar year 1931.

The nominal capital of all companies carrying on operations in Mysore was—

			£.	s.	d.
In December 1931	...	...	1,717,000	0	0
and in December 1930	...	...	1,717,000	0	0
or the same for both years					

The amount of the above capital called and paid up was—

			£.	s.	d.
In December 1931	...	...	1,667,737	0	0
and in December 1930	...	...	1,667,737	0	0
no change.					

The number of Companies which carried on operations during the year was five or the same number as in the previous year, all of which produced gold and paid dividends.

The quantity of fine gold produced—

			Ozs.
During 1931 amounted to	...	...	330,434·024
and during 1930 to	...	...	329,133·876
being an increase of	...	...	1,300·148

The quantity of fine silver produced—

			Ozs.
During 1931 amounted to	...	...	22,604·850
and during 1930 to	...	...	17,843·988
being an increase of	...	...	4,760·862

The total value of fine gold and silver produced—

			£.	s.	d.
During 1931 amounted to	...	...	1,560,739	10	4
and during 1930 to (revised)	...	...	1,396,145	14	4
being an increase of	...	...	164,593	16	0

or an increase of 11·79 per cent as against a decrease of 9·95 per cent (revised) in the previous year; the increase in value is mostly due to high price of gold prevailing in the market and to the small increase in production.

The total amount paid in dividends—

			£.	s.	p.
During 1931 was	...	...	219,010	16	0
and in 1930	...	...	179,000	0	0
being an increase of	...	...	40,010	16	0

The total dividends paid during the year (for all the five companies) amounted to 13·13 per cent of the paidup capital, the corresponding figures for 1930 being 11·82 per cent (revised) of the four dividend paying companies or 10·73 per cent of all the five producing companies.

The royalty payable to Government on the gold and silver won and dividends paid amounted to—

			£	s.	d.
During the year 1931	...	...	83,094	0	4
as against in 1930 (revised)	...	...	74,060	6	11
being an increase of	...	...	9,033	13	5

the increase being 12·20 per cent as against a decrease of 11·71 per cent in 1930 (revised).

II. Total Gold Production, Dividends and Royalty from 1882 to the end of 1931.

The total quantity of fine gold produced from the commencement of mining operations is—

			Ozs.
Up to the end of 1930	...	...	16,592,153·859
and for 1931	...	...	330,434·024
Grand Total	...	...	16,922,587·883

The total value of gold bullion produced—

			£.	s.	d.
Up to end of 1930 (revised)	...	...	71,726,062	19	11
and for 1931	...	...	1,560,739	10	4
Grand Total	...	...	73,286.802	10	3

Total dividends paid—

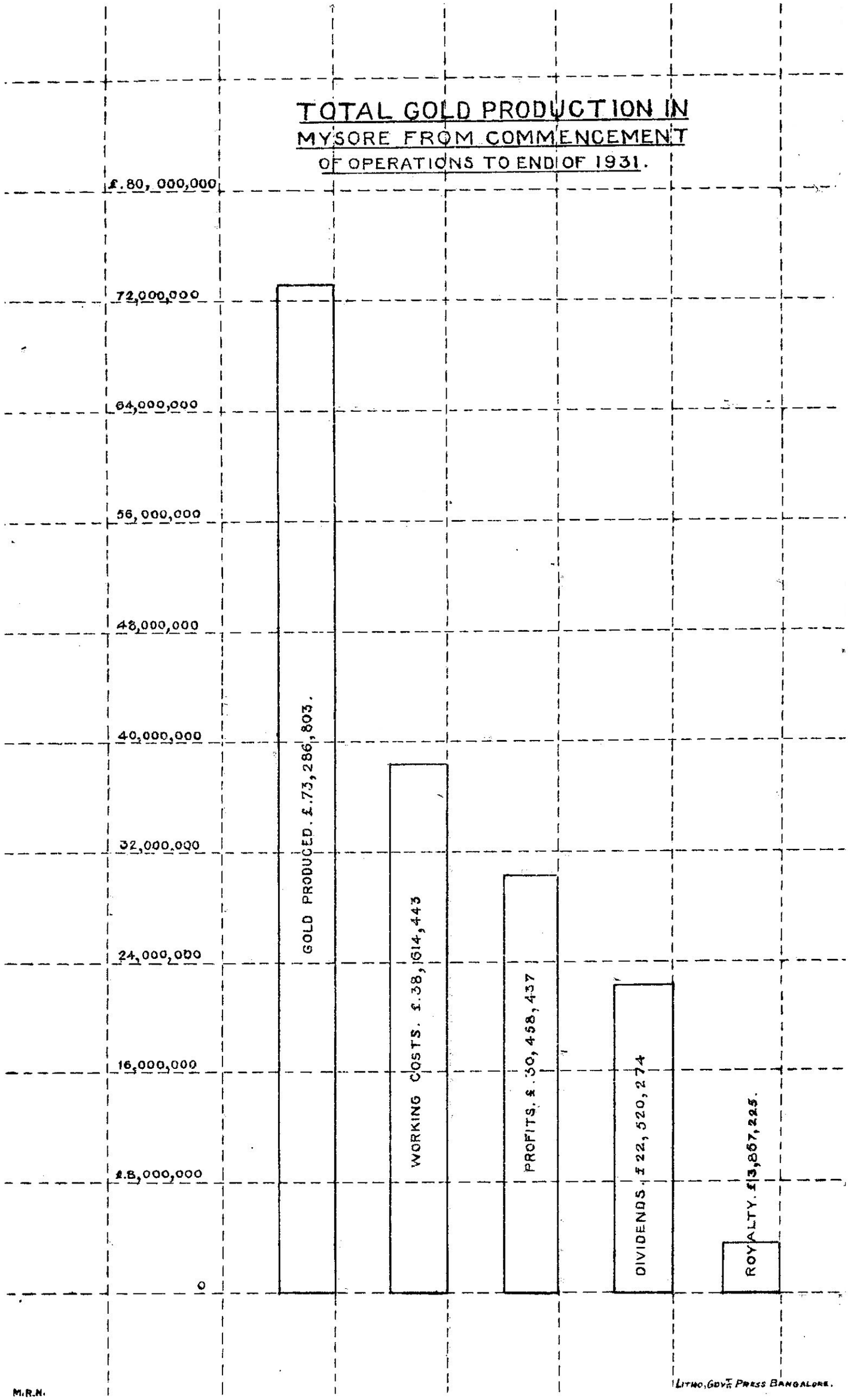
			£.	s.	d.
Up to end of 1930	...	...	22,301 263	8	8
and for 1931	...	...	219,010	16	0
Grand Total	...	...	22,520,274	4	8

The amount of royalty which has been paid to Government is—

			£.	s.	d.
Up to the end of 1930 (revised)	...	...	3,784,130	13	2
and for 1931	...	...	83,094	0	4
Grand Total	...	...	3,867,224	13	6

The total value of gold produced, working costs, profits earned, dividends declared and royalty paid from the commencement of operations to the end of the year 1931 have all been graphically represented in the following chart :—

TOTAL GOLD PRODUCTION IN MYSORE FROM COMMENCEMENT OF OPERATIONS TO END OF 1931.



M.R.H.

LITHO, GOVT. PRESS BANGALORE.

III. Statement showing the amount of royalty payable to Government, the amount paid and the balance still due for the year 1931.

(As furnished by the Comptroller).

Gold (A)

No.	Name of Mine	Balance due on account of the previous year	Amount due for the current year	Total demand	Collection	Balance due (1st January 1932)
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Mysore	1,18,872 3 0	3,15,612 10 0	4,34,484 13 0	3,38,209 9 0	96,275 4 0
2	Champion Reef ...	66,119 9 0	2,13,956 2 0	2,80,075 11 0	2,18,973 9 0	61,102 2 0
3	Ooregum ...	66,055 9 0	2,00,909 15 0	2,66,965 8 0	1,98,493 10 0	68,471 14 0
4	Nundydroog ...	82,788 12 0	2,72,795 9 0	3,55,584 5 0	2,71,109 0 0	84,475 5 0
5	Balaghat ...	23,453 2 0	(a) 81,370 13 0	1,04,823 15 0	78,720 9 0	26,103 6 0
	Total ..	3,57,289 3 0	10,84,645 1 0	14,41,934 4 0	11,05,506 5 0	3,36,427 15 0
	Total for 1930 ...	2,64,655 10 0	10,06,961 10 0	12,71,617 4 0	9,14,328 1 0	3,57,289 3 0

(a) The royalty paid at 2½ per cent on dividends declared amounting to £501-3-3 or Rs. 6,722-3-0 is not included in this figure.

Silver (B).

No.	Name of Mine	Balance due on account of the previous year	Amount due for the current year	Total demand	Collection	Balance due (1st January 1932)
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Mysore ...	130 13 0	*303 14 0	434 11 0	262 11 0	172 0 0
2	Champion Reef ...	117 13 0	*364 5 0	482 2 0	261 10 0	220 8 0
3	Ooregum ...	130 2 0	364 12 0	494 14 0	273 0 0	221 14 0
4	Nundydroog ...	151 3 0	428 4 0	579 7 0	332 13 0	246 10 0
5	Balaghat ...	34 13 0	121 0 0	155 13 0	83 9 0	72 4 0
	Total ...	564 12 0	1,582 3 0	2,146 15 0	1,213 11 0	933 4 0
	Total for 1930 ...	615 2 0	1,028 1 0	1,643 3 0	1,078 7 0	564 12 0

*Royalty realised on silver obtained from cyanide slags is included in the figures for gold.

IV.—Gold Production for the six months ending 30th June 1932.

Name of Mine		Fine Ozs.	Fine Ozs.	Value £ Stg. (estimated)
Mysore ...	Current ore	42,887·18		
	Re-treatment of tailings dumps ..	...		
	Other sources	...		
	Total ...	...	42,887·18	238,319
Champion Reef ...	Current ore	28,046·74		
	Re-treatment of tailings dumps ...	4,108·27		
	Other sources	...		
	Total ...	...	32,155·01	173,833
Ooregum ...	Current ore	20,530·96		
	Re-treatment of tailings dumps ...	5,695·34		
	Other sources	59·68		
	Total ...	...	26,285·98	146,229
Nundydroog ...	Current ore	44,689·06		
	Re-treatment of tailings dumps ...	2,645·65		
	Other sources	...		
	Total ...	...	47,334·71	263,431
Balaghat ...	Current ore	8,981·81		
	Re-treatment of tailings dumps ...	...		
	Other sources	5,205·50		
	Total ...	...	14,187·31	78,919
	Grand Total ...	...	162,850·19	900,731

NOTE.—The figures in this statement are subject to revision.

V. Number of Mines.

GOLD.

Active or Producing.

Mining operations were in progress on the following five blocks on the Kolar Gold Field as in the previous year.

1. Mysore Block, comprising Mining Leases Nos. 127, 128, 129, 130, 134, 144, 151 and 152 worked by the Mysore Gold Mining Company, Limited.
2. Champion Reef Block, comprising Mining Leases Nos. 121 and 136 worked by the Champion Reef Gold Mines of India, Limited.
3. Ooregum Block, comprising Mining Leases Nos. 132 and 137 worked by the Ooregum Gold Mining Company of India, Limited.
4. Nundydroog Block, comprising Mining Leases Nos. 123, 139, 145 and 162 worked by the Nundydroog Mines, Limited.
5. Balaghat Block, comprising Mining Leases Nos. 120, 146 and 163 worked by the Balaghat Gold Mines, Limited. These leases were assigned to the Nundydroog Mines, Limited, with effect from 1st May 1932 on the following terms:—

The Balaghat Mining Leases Nos. 120, 146 and 163 comprising 1,818 acres, the mine workings, the pumping plant, winding engines at surface and underground, electric power lines and cables, air mains, compressors, buildings, etc., required for keeping the mine unwatered, and the winding engine with all accessory plant and equipment of the Deep Level Main Winze, were assigned during the year to the Nundydroog Mines, Ltd., for £40,000 to be paid in cash spread over a period of nine months.

For mining and milling the ore reserves, Nundydroog Mines, Limited, makes a charge of 24 s. per ton of ore milled, and after deducting from the net sale proceeds of the bullion recovered, (*a*) royalty of five per cent payable to the Government of Mysore, (*b*) the above charge of 24 s. per ton milled, (*c*) the cost of keeping the Balaghat Mine free of water during the period of this working arrangement, the remaining profit to be divided in the ratio of 75 per cent to Balaghat Mines Limited, and 25 per cent to Nundydroog Mines, Limited.

Inactive or Non-producing.

1. Krishnarajapur Block, Mining Lease No. 119.
2. East Betrayaswami Block, Mining Lease No. 118, option, held by the Mysore Gold Mining Company, Limited.

No prospecting or mining work for gold was done outside the Kolar Gold Field. All the producing mines paid dividends for the year under report, the amount distributed being £219,010-16-0 or 13·13 per cent of the paid up capital of all the Companies, showing an increase of £40,010-16-0. The Nundydroog Company paid the highest rate of dividend, *viz.*, 27½ per cent while Champion Reef and Ooregum Companies paid a slightly higher rate and Mysore Company reduced the rate by 2½ per cent. The Balaghat Company which was unable to pay any dividends during the last year declared a dividend of 10 per cent on ordinary and 20 per cent on preference shares. The high price of gold helped some of the Companies to distribute higher rates of dividends.

The year's operations resulted in an output of 330,434·024 ozs. of gold and 22,604·85 ozs. of silver, an increase of 1,300,148 ozs. of gold and 4,760·862 ozs. of silver compared with last year's production. Correspondingly the total value £1,560,739-10-4 was £164,593-16-0 in excess of previous year....This increase in value was mostly due to the high premium on gold. Details of gold production, value, royalty, etc., are available in Table 1 of this report.

Owing to great depths the mines on this field have reached at present, the working costs are on the increase, details of which are given in Tables 5 and 6 appended to this report.

Ore Reserves.—The estimated total ore reserves of all the mines at the end of the year 1931 shows a decrease of 62,623 tons against a decrease of 127,106 tons at the end of 1930. The Champion Reef and the Nundydroog Mines made considerable additions to their ore reserves, while Mysore, Ooregum and Balaghat being unable to find new shoots of ore were obliged to draw from the reserves.

The following statement gives the estimated reserves of ore at the end of 1931 compared with 1930:—

	1930	1931	Difference +more or —less	Average tonnage crushed during the preceding 5 years
Mysore	471,418	445,260	—26,158	214,749
Champion Reef	229,127	239,055	+9,928	99,548
Ooregum	215,500	174,047	—41,453	150,641
Nundydroog	302,827	319,656	+16,829	127,200
Balaghat	41,523	19,754	—21,769	44,730
Total ...	1,260,395	1,197,772	—62,623	636,868

Ventilation.—All possible arrangements are being made to ensure an adequate supply of fresh air to all the working places. The Champion Reef and Ooregum Mines have reached a vertical depth of over 7,100 feet below the field datum. All the new shafts and winzes which serve as air ways are smooth lined in brick or concrete not only to minimise the effects of rockbursts but also to reduce friction, and electrically driven fans have been erected in the course of the main air-ways at suitable places to aid the circulation of air currents. The question of providing adequate ventilation in deep mines is a very difficult problem and it is engaging the serious attention of expert ventilation Engineers in all mining centres as here. The complex nature of it will be better appreciated when it is remembered that the rock temperature at the depth to which these mines have now attained is about 124°F., and the dry bulb temperature at the working points in the bottom levels ranges from 104°F. to 111°F., and the wet bulb from 87°F. to 93°F., the difference between the two temperatures ranging generally from about 11 to 24 degrees.

Rescue Station and Safety-First Campaign.—The rescue station, as usual, is being maintained in a very efficient condition and though there was no serious outbreak of fire this year comparable to the one that occurred in Nundydroog Mine last year, there were a few occasions when the services of the proto gangs were requisitioned. These gangs were able to locate the seat of fire in each case without loss of time and put it out before causing any damage to person or property. Since the disastrous fire of last year, certain additional precautions have been taken by providing refuge stations with compressed air jets at suitable places. The fire alarm signal is communicated to the under-ground workmen by pouring a sufficient quantity of eucalyptus oil in the air mains and all the men have been warned to run to the riding shaft and reach surface immediately the smell of eucalyptus is felt. It was found in practice that the smell of eucalyptus oil was felt at the bottom workings of the mines, 7,100 feet below, in three minutes.

The 'safety first' campaign to prevent accidents is being carried on vigorously as usual and a large number of Indian workmen are trained in 'first aid' methods to render assistance in cases of accidents underground. In addition to this, the 'scout movement' which has recently been organised, is spreading rapidly amongst the workmen making them more efficient, self-reliant and resourceful. It is hoped that the present enthusiasm for the spread of the movement will continue unabated.

Base Minerals.

The great slump in the world's markets for the two important base metals of the State, Manganese and Chromium, continues the same as last year. The United Steel Companies, Limited, Workington Iron and Steel Branch, Shimoga, the biggest manganese concern in the State, and the Peninsular Minerals Company, Limited, have both surrendered their leases abandoning large quantities of low grade ore on the mines due to the universal trade depression. The Keshapur Manganese Mine worked by Mr. H. D. Coggan, is producing small quantities of high grade pyrolusite (Manganese dioxide) which is being shipped to London market. Except this, all other manganese blocks in the State are dormant.

The following extract from the Mining Journal of 7th May 1932 regarding Indian Manganese is of interest :—

> "Manganese Depression.—The Indian Manganese Ore industry has been hard hit, and that the condition of the industry is worse to-day than it had ever been since it was started is the opinion expressed by Mr. Bartlett, General Manager of the C. P. Manganese Ore Company and President of the Mining and Geological Institute of India. The position is due to the general trade depression and particularly to the dumping of the Russian Manganese Ore in the world's markets. There was both a reduced demand and prices also were brought down by the Russian dumping at very low prices ..... The plight of the industry can be realised from the fact that between 1920 and 1930 the average production of Manganese Ore per annum was 600,000 tons, but to-day it has fallen to about 100,000 tons."

The Chrome Ore industry of the State has also received a serious check. Most of the chrome mining concerns have suspended operations except at Sinduvalli Mine, Mysore Chromite, Limited, which is producing comparatively small quantities of high grade chromite against secured orders. This collapse is in the main attributable to over-production from new fields in Russia and elsewhere. By quoting competitive prices they have managed to get a footing in the world's market. Southern Rhodesia contains enormous deposits of high grade chrome, the ore reserves being sufficient to supply the world's normal demands for many years. Due to collapse of the base metal markets of the world, there was a large decrease in Rhodesian output from 293,116 tons in 1929 to 89,974 tons in 1931.

VI.—Notes on Mines.

Mysore Mine.

The normal work of this mine during the year was seriously hampered by a series of very heavy rockbursts which caused considerable damage to shafts, levels and stopes resulting in reduced output. A total of 182,731 tons of current ore milled yielded 95,987·618 ozs. of fine gold as compared with 190,829 tons and 101,826·978 ozs., during the previous year—a decrease of 8,098 tons and 5,839·360 ozs., respectively. Though the output was less the total realisation was better owing to the increased price of gold during the latter part of the year from 85 sh., an oz. to 110 sh., at which figure it is more or less steady. The value of bullion produced was £449,896-0-10, being an increase of £18,717-16-10 over that of last year. The mining of certain rich pillars of ore commenced during the previous year was continued this year also yielding 5,289 ozs. of gold. The cost per ton milled, inclusive of administration, rose from 29·98 sh. to 33·95 sh., owing to increased expenditure on reconditioning of the damaged parts of the mine. The estimated ore reserve at the end of December 1931 was 445,260 tons—a reduction of 26,158 tons as compared with last year's estimate.

Development.—The short length of quartz reef encountered while driving the Main Haulage at the 76th level is being developed in depth by sinking a Pilot Winze which reached a depth of 77 feet at the end of the year exposing ore of good value throughout. The exploratory work carried out between the 67th and 73rd levels, Edgar's Auxiliary Shaft was satisfactory. The discovery of a new body of ore on the north side of the slide in the 45th level, McTaggart's Section, has resulted in a small addition to the ore reserves. Exploratory work carried out at the 790 ft. level, McTaggart's Incline, has exposed a few blocks of payable ore. Further development in depth of the far east reef in Pilot Shaft mentioned in last year's report was abandoned as no discovery of any importance was made.

The sinking of Edgar's Sub-Vertical Shaft is being continued and it holed through to the 76th level Main Haulage. Arrangements are in progress to continue sinking two auxiliary vertical shafts at the north aud south ends of the main haulage.

Auxiliary travelling and haulage ways in the footwall of the reef at certain horizons, referred to in last year's report, are almost nearing completion. As some of the reef drives have become inaccessible owing to rockbursts, the remnants of ore pillars will be worked from these footwall drives as a safety-first measure.

The deepest point in the mine was the bottom of Pilot Winze 152 feet below the 76th level or, 6,320 feet vertically below field datum.

Ventilation.—The installation of the electrically driven 50″ fan at the 51st level, Ribblesdale's No. 2 Auxiliary Shaft, was completed during the year and this greatly improved the ventilation of the stoping area above this horizon. Several connections between levels and shafts were effected to improve air circulation.

General.—Two Mancha electric battery locomotives are in use, one at the 51st level, Edgar's Shaft, and the other at the 44th level McTaggart's Vertical Shaft—and at both these places fully equipped charging stations have also been provided.

The programme of building packwalls in stopes and arching the levels in concrete or brick is being continued to minimise the effects of rockbursts.

During the year, 3,154 feet of diamond drilling was done underground but nothing of value was discovered.

Champion Reef Mine.

During the year, 98,930 tons of current ore and 228,226 tons of old tailings treated, produced 65,702·743 ozs. of fine gold, being an increase of 3,060·286 ozs., over that of last year. The total realisation for the year amounted to £ 308,637-11-6 yielding a profit of £ 68,624-9-2 — an increase of £ 26,045-14-6, resulting in the payment of a dividend of 1 sh. 6 d. per share or 15 per cent. An addition of 9,928 tons was made to the ore reserves which were estimated at 239,055 tons at the end of the year.

Development.—The ore shoot discovered in the southern section is being vigorously developed in the bottom levels and the 75th level is being driven on at present and the results achieved so far are highly satisfactory.

The new west reef discovered in the 70th level in the northern section of the mine was driven on for 623 feet, but the whole length of it was unproductive; driving north is being continued on the same reef.

Under arrangement with the Mysore Gold Mine, the 70th level drive S. is being extended into their property and nothing of importance has yet been discovered here.

Development work is also being carried out in the top levels of Tennant's and Carmichael's Shafts at the 800 and 300 ft. levels to prove "Mundy's lode" which is 400 ft. west of the main lode. A good length of payable ore was opened up at the 800 ft. level and the driving at the 300 ft. level has not progressed far enough to intersect the reef.

The sinking of the three important shafts, Heathcote Shaft, the North Development Winze and the South Development Winze, was continued and all of them reached varying depths below the 74th level. The deepest point in the mine was the sink of North Development Winze—76th level—7,180 feet below field datum.

Ventilation.—The installation of a 53″ "Sirocco" fan at the 59th level, Glen's Secondary Shaft, has considerably improved the ventilation of the working places in the deeper levels. The North Ventilation Winze which is 12′ × 8′, elliptical and concrete lined, has been completed from the 67th to the 72nd level, forming the main upcast airway in the north section of the Mine, while Glen's Main Winze serves as the main upcast in the south section.

An average of 99,239 cubic feet of air per minute was found to be entering the mine through the downcast shaft at a temperature of 70°F. dry and 65°F. wet (average).

Ooregum Mine.

Though there was a decrease of 680·005 ozs. in the production of fine gold during the year, the total realisation was better by £ 30,700-14-7 owing to the premium on gold, which enabled the company to pay dividends on both the preferential and ordinary shares, while former shares alone received dividends during the previous year. The average assay value of the ore milled fell from 7·64 dwts. to 7·51 dwts. per ton and the total tonnage milled also dropped from 143,761 tons to 135,095 tons, while the old tailings retreated was increased from 225,739 tons to 260,905 tons

to make up the deficiency in the current ore. The estimated ore reserves at the end of the year was 174,047 tons, being a decrease of 41,453 tons as compared with the previous year's figure.

Development.—Exploratory work as detailed in last year's report is being continued and the persistence of the ore body in depth is an encouraging feature. Development in the intermediate levels—74th and 75th—was confined to the extent of the reef—appreciable lengths of which were opened up in both Bullen's and Auxiliary Sections—but the values were not altogether satisfactory.

Through levels connecting the main shafts are driven every three hundred feet. The 76th level is being developed at present and will be driven from end to end of the property and further development will be commenced from this horizon.

The sinking of Bullen's Incline and Auxiliary Shafts was continued, the former reaching a depth of 42 feet and the latter 26 feet below the 76th level. The deepest point in the mine was the sink of Bullen's Incline, 7,068 feet vertically below field datum.

Ventilation.—About the end of the year, the ventilation system was altered whereby the Auxiliary Shaft which was upcast was turned downcast by diverting the downcast air from Oakley's Shaft at the 52nd level. The downcast air which reaches the 76th level through this shaft is forced to return through air ways and worked out stopes to the 50th and the 44th levels where it joins the main upcast air currents in the circular shaft. This arrangement did not interfere with the north section of the mine where Bullen's Incline remained the main downcast air way as before. The existence of two fresh air columns at the ends of the mine is of great importance in case of a fire in the stoping areas, when they can be used as places of refuge or bases for fire fighting.

Nundydroog Mine.

In spite of the disastrous fire in May 1931 which seriously affected the normal output of the mine for four months, the total gold production for the year amounted to 79,935·841 ozs. showing an increase of 1,365·833 ozs. obtained as a result of the higher grade of ore treated—the average assay value being 11 dwts. 11 grs. as compared with 10 dwts. 19 grs. in the previous year. The total value of bullion produced amounted to £ 378,450-11-11 yielding a profit of £ 116,020-10-0 as compared with £ 100,408-16-3 for the preceding year—an increase of £ 15,611-13-9, mostly due to the premium on gold during the latter part of the year. A total dividend of 2 sh. 9 d. per share or 27½ per cent as compared with 25 per cent in the previous year was distributed to the share holders. The increase of 2·81 shillings per ton in the working cost was entirely due to increased expenditure as a result of the fire.

Development and exploratory work had to be suspended during the period of fire with the result that only 16,829 tons were added to the ore reserves which at the end of the year was estimated at 319,655 tons.

Development.—The results of the exploratory work carried out in all the three sections of the mine—Oriental, Kennedy's and Taylor's—were highly encouraging and large bodies of payable ore have been opened up. The considerable length of payable reef encountered in the 54th level N., Oriental Section, was found to persist in depth up to the 57th level where it is being driven on at present with very encouraging results. The development of the ore shoot in Kennedy's Section was not quite satisfactory as only short lengths of payable reef were found in the 54th and the 55th levels. In the southern section—Taylor's—development work was considerably hampered owing to No. 3 Auxiliary Shaft being flooded during the fire. Lenticular bodies of payable ore are being opened up occasionally in this section of the mine and the prospects are encouraging. The 57th level N., commenced by the Ooregum Mine last year was continued into this mine and driven for 151 feet on payable ore of good width.

The sinking of the three auxiliary shafts was continued during the year. The deepest point in the mine was the sink of No. 1 Auxiliary Shaft, which has reached a depth of 5,211 feet below field datum.

Ventilation.—Following the assignment of the leases of the adjoining Balaghat Gold Mine to this Company on 1st May 1932, the scheme of ventilation detailed in the last year's report had to be completely altered in the north section to suit both

the mines. The Deep Level Main Winze and other Shafts of the Balaghat Mine will form the main upcast air-ways for both the mines. A new fan chamber is being cut at the 45th level Deep Level Main Winze for a fan in the course of main upcast air-ways and the existing fan at the bottom of Henry's Shaft—the main downcast shaft, will be put out of commission. At the southern end of the property a fan chamber will be cut at the 48th level, Taylor's Shaft, and the existing fan at the 50th level in this section will be transferred to the new chamber.

Reduction Plant.—The Tube Mill and the Classification Plants were reconstructed during the year and 12 blanket machines have replaced the old blanket tables. The treatment of old tailings of Sonnakuppam Tank was commenced during the year but the operations are beset with many difficulties owing to the presence of deleterious matter which necessitates ploughing, weathering and screening the tailings before treatment.

Balaghat Mine.

As a result of crushing increased tonnage of high grade ore combined with the prevailing premium on gold, this Company was able to earn sufficient profit during the year to wipe off last year's debit balance and distribute dividends to the shareholders. The tonnage treated, 41,850 tons—an increase of 2,650 tons over the last year's tonnage crushed—produced 25,811·966 ozs. of fine gold valued at £ 122,895-18-0 yielding a profit of £ 14,376-15-7 which with the income derived from other investments amounted to £ 22,147-9-1 available for distribution to the share holders. A dividend of 20 per cent on preference shares and 10 per cent on ordinary shares amounting to £ 20,166-10-0 were paid.

The reserves of ore estimated at the end of the year stood at 19,754 tons.

Development.—The results of further exploratory work carried out during the year proved very disappointing. The levels driven on the lode North of No. 3 Winze and the winzes sunk at various points below the 48th level disclosed the continuity of the reef in depth but no part of it was of any appreciable value. The 55th level North of No. 3 Winze had to be suspended during the year owing to repeated rockbursts.

The sinking of the No. 1 Deep Level Main Winze and the No. 3 Winze S. was continued, the former reaching a depth of 164 feet below the 56th level or 5,409 feet vertically below surface—the deepest point in the mine.

General.—In view of the unfavourable outlook of the mine and the limited resources available for further exploration, the Directors recommended the cessation of operations and transfer of the property to the adjoining Nundydroog Mines, Ltd. As the shareholders agreed to the above recommendations the mining lease of this Company, comprising 1,818 acres of land, the mine workings, the pumping plant, winding engines at surface and underground, electric power lines and cables, air mains, compressors, buildings, etc., were assigned to the Nundydroog Mines, Ltd., for a consideration of £ 40,000 payable in cash spread over nine months. The future working of this mine will be carried on by the Nundydroog Mines, Ltd. The old Company may probably go into liquidation about the end of the year by which time it is hoped that all the available ore reserves will have been fully worked out.

Pensamudra Chrome Mine, Mysore Chromite, Ltd., Arsikere.

No Development or mining work was carried out in this mine during the year as there was no market for the low grade ore available here. An experimental concentrating plant was installed and 32 to 34 per cent ore was concentrated to 51 to 51·5 per cent Cr_2O_3, but the cost of concentration was found to be more than that of the crude ore of the same grade.

Shinduvalli Chrome Mine, Mysore Chromite, Ltd., Mysore District.

During the year 3,272·75 tons of reef ore, 251·7 tons of pebbles and 17 tons of powder were produced. Due to general trade depression and restricted demand for this ore, mining was carried out on a limited scale. Concentration of ore by hand washing and screening by wet process was carried out on a small scale and 17½ tons of concentrate produced.

Development.—The total development work including the sinking of shafts and winzes, rising, driving levels and crosscuts amounted to 182 ft.

N. S. 3 shaft was sunk to a depth of 365 ft. and suspended. A rise from the crosscut west at the 272 ft. level has been holed through to the 230 ft. level for a chute.

N. S. 2 shaft was stripped and fully timbered to a depth of 27⅔ ft. and this work will be continued to the 110 ft. level.

General.—Social amenities such as Reading Room, Badminton Court, etc., have been provided for the benefit of the employees.

VII.—Electric Power Supply.

(a) Cauvery System.

The following statement, kindly furnished by the Chief Electrical Engineer to Government, shows the number of motors in service and the power consumed by the different mines during the calendar year 1931 :—

Name of Mine	Number of motors in service	Nominal H.P.	Rated H.P.	Average constant H.P. absorbed	Annual consumption in B.T.U.
Mysore ...	47	4,918·5	4,268	2,985	19,503,700
Champion Reef ...	31	4,059·9	3,688	2,718	17,762,000
Ooregum ...	32	4,782·5	3,699	2,841	18,570,000
Nundydroog ...	27	3,459·5	2,964	2,092	13,672,200
Balaghat ...	24	1,622·5	1,484	1,019	6,658,500
Total ...	161	18,842·9	16,103	11,655	76,166,400
Total for 1930 ...	155	18,530·4	15,789	11,161	72,936,000

(b) Kolar Mines Power Station, Ltd.

The following notes have been kindly furnished by Mr. G. W. Richardson, Chief Electrical Engineer, for the year ended 30th June 1932 :—

At the 30th June last, 273 motors with an aggregate horse-power of 26,193·75 were connected to this Company's distribution system and of that number 95 motors aggregating 19,102·25 H. P. were operating Winding Engines and Hoists, while the remainder, namely 178 motors with a total of 7,091·50 H. P. were being used to drive intermittent loads of other classes.

The consumption of power for different purposes during the year is given below in Board of Trade Units :—

	Intermittent Power.	*Hoisting.*	*Lighting.*
	8,317,195	9,499,560	684,984
Total Units sold during the year	18,501,739		

The rates prevailing at 30th June 1932 were as follows :—

Intermittent power	·5 d.
Hoisting ,, ...	·7 d.
Lighting ,, ...	4·5 d.

The horse power of 156 motors which were connected to the Cauvery System at June 30th totalled 16,073 at Government ratings, or 19,305½ at manufacturers' ratings. Adding the latter figure to the figure for the Kolar Mines Power Station, Limited, a total of 45,499·25 is arrived at as the total horse-power of motors in service on the Mines at 30th June 1932.

No Stoppages owing to scarcity of water were experienced during the period in question.

Comparative Statement of Power Consumption.

Official year	Cauvery Power		Kolar Mines Power		Total number of motors in use	Total consumption in B.T.U. from both stations
	Number of motors in use	Annual consumption in B.T.U.	Number of motors in use	Annual consumption in B.T.U.		
1921—22 ...	118	80,188,542	133	5,681,125	251	85,869,667
1922—23 ...	145	88,834,223	152	6,897,125	297	95,731,348
1923—24 ...	160	93,399,813	163	7,380,080	323	100,779,893
1924—25 ...	165	95,533,550	164	7,662,490	329	103,196,040
1925—26 ...	166	90,421,604	172	8,262,284	338	98,683,888
1926—27 ...	149	85,214,687	198	11,149,016	347	96,363,703
1927—28 ...	143	97,190,966	219	13,968,284	362	111,159,250
1928—29 ...	151	84,109,600	237	14,557,406	388	98,667,006
1929—30 ...	156	80,945,652	260	15,071,035	416	96,016,687
1930—31 ...	158	82,646,288	276	18,405,923	434	101,052,211
1931—32 ...	161	75,766,200	273	18,501,739	434	94,267,939

From the above figures it will be seen that the consumption of Cauvery Power is generally on the decrease and that of Kolar Mines Power on the increase and that the total consumption in B. T. U. from both the stations reached its maximum in the year 1927-28 and has since then been fluctuating.

C.—MANGANESE, CHROMITE, MAGNESITE, KAOLIN, SOAPSTONE, CORUNDUM, GREEN QUARTZITE, KYANITE, STAUROLITE, GARNET, ASBESTOS AND MICA.

1. Manganese.

There were 7 mining leases and 3 prospecting licenses current for this mineral as against 9 and 5 respectively in the previous year.

The following statement shows the quantities of ore extracted and removed from the several blocks during the year together with the royalty payable thereon :—

Name of lessee or licensee	No. of lease or license	District	Output	Quantity removed from block	Royalty
			Tons.	Tons.	Rs. a. p.
United Steel Cos., Ltd. ...	M. L. 141 & 142 P. L. 723 & 729.	Shimoga...	...	4,692·3	2,057 5 10
Messrs. V. Manickavelu Mudaliar & Son.	M. L. 171	Do ...	25	...	...
Mr. H. D. Coggan ...	P. L. 727	Do ...	502·25	400·25	215 13 6
		Total ...	527·25	5,092·55	2,273 3 4

2. Chromite.

As in the previous year there were 10 leases current for this mineral but the work was actually confined to 6 blocks.

The result of mining operations for the year is detailed in the following statement :—

Name of lessee or licensee	No. of lease or license	District	Output	Quantity removed from block	Royalty
			Tons.	Tons.	Rs. a. p.
Messrs. V. Manickavelu Mudaliar & Son.	M. L. 158, 159 & 160.	Hassan ...	395·00	...	...
Mysore Chromite, Ltd. ...	M. L. 174	Do ...	64·00 34·25 (concentrate)	1,572·74	2,359 1 10
Do ...	M. L. 147	Mysore ...	3,541·45	5,444·81	4,083 9 9
		Total ...	4,000·45 +34·25 (concentrate)	7,017·55	6,442 11 7

3. Magnesite.

There were 3 mining leases current for this mineral but active mining operations were carried only on one block. The quantity of ore mined and railed was 335 tons and 1,486 tons, respectively.

The holders of the above leases, *viz.*, Messrs. The Tata Iron and Steel Co., Ltd., having paid a dead rent of Rs. 1,760 in respect of all the three blocks held by them, no royalty was levied.

4. Kaolin.

The Kolar Brickmaking Co., Ltd., mined and removed a quantity of 2,242·45 tons of this mineral from the two blocks held by them and paid a royalty of Rs. 1,813-13-0.

In addition to the above there has been a small output and removal of 23 tons from two blocks held under prospecting licenses for working small factories for the manufacture of slate pencils and marbles, etc. The royalty recovered was Rs. 28.

5. Soapstone.

There were four collecting licenses current for this mineral during the year, only two of them being for the full year. The total output and removal was 100 tons. A sum of Rs. 175 was recovered on account of royalty, including Rs. 50 being guaranteed royalty in respect of a fresh license issued about the close of the year.

6. Corundum.

Two licenses for collecting corundum were issued during the year on a minimum guaranteed royalty of Rs. 50 for each, but no work has yet been done by the licensees.

7. Green Quartzite.

One prospecting license for this mineral was issued during the year and a small output of 1·07 ton is reported.

8. Kyanite, Staurolite and Garnet.

There were two licenses current for these minerals but no work was done on these blocks owing to the trade depression since the obtaining of the licenses.

9. Asbestos and Mica.

One license for these two minerals was issued during the year; work has not yet been started on this block.

Demand, Collection and Balance of Mining Revenue and Geological Receipts Other Than Royalty on Gold for the Year 1931-32.

Items	Opening balance	Demand			Collection			Balance		
		Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1. Royalty	...	10,949	5	11	10,949	5	11	...		
2. Rent on Mining and Prospecting lands.	...	16,084	1	8	16,084	1	8	...		
3. Other receipts	...	295	0	0	295	0	0	...		
4. Geological receipt	..	2,518	0	5	2,328	12	0	189	4	5
5. Receipts by sales of chromite credited to advance head.	...	46,620	0	0	46,620	0	0	...		
6. Revenue deposits	...	350	0	0	350	0	0	...		
Total ...	...	76,816	8	0	76,627	3	7	189	4	5

The above information is extracted from particulars kindly furnished by the Officiating Director, Mysore Geological Department.

Figures relating to the output of chromite, iron ore and limestone during the calendar year 1931 in the areas worked by Government Agency are included in Table 4 appended to this report.

D.—OFFICIAL DUTIES, 1931-32.

Constitution of the Department.—The constitution of the Department remained the same as in last year, *viz*:—

Chief Inspector of Mines in Mysore	... ...	Mr. C. E. Suryanarayana Rau
Inspector of Mines (Acting)	... ...	„ K. Duraiswamier
Assistant Inspector of Mines (Acting)	... ...	„ V. Narayana Rau
Junior Inspector of Mines (Provisional)	...	„ J. P. David
Probationer	... ...	„ R. S. Batni

Office Inspection.

The annual inspection of the office was carried out in April 1932. Everything was found to be in order.

Statistics of Business.

During the year 2,496 letters were received and 2,353 despatched compared with 2,440 and 2,283 in the previous year.

Stores and Stock-Taking.

The Stock Registers relating to furniture and other articles are written up-to-date. These were checked as required by Codal Rules and found correct.

Inspection of Mines—Kolar Gold Field.

Owing to the increasing depths of these mines, two of which have reached a depth of over 7,100 ft. below field datum, inspection work is becoming more arduous and exacting. In addition to the numerous inspections connected with accidents, all the mines were systematically inspected and no serious lapses of the Mining Rules were noticed. In a few cases the defects brought to the notice of the Mine management were immediately set right and all suggestions carried out.

Enquiries into all fatal and serious accidents and trivial ones in which a breach of the rules was reported or suspected, have been held.

Examination of Candidates for Certificates Under the Mining Rules.

Under rules 15 and 16, Mysore Mining Rules, examination for the grant of certificates of mestris, blasters and engine drivers (1st and 2nd class) are conducted by the Department once a week. In all, 372 candidates were examined during the year.

The following statement shows the number of candidates examined and certificates granted up to the end of June 1932.

Year	Mestris		Blasters		Engine drivers			
					First Class		Second Class	
	Number examined	Number passed	Number examined	Number passed	Number examined	Number passed	Number examined	Number passed
Total up to June 1931.	13,886	13,618	9,450	8,862	421	421	203	203
For 1931-32 ...	220	220	141	106	2	2	9	9
Total up to end of June 1932.	14,106	13,838	9,591	8,968	423	423	212	212

On application and after verification, 81 duplicate tickets (discs) were issued to mestris and 1 to an engine driver (second class), the originals having been lost by the applicants.

The fees realised during the year from candidates appearing for the above examinations, duplicate discs and fees levied for testing the lightning conductors attached to explosives magazines, etc., amounted to Rs. 1,713-9-0 as against Rs. 2,583-9-0 in the previous year, the decrease being due to lesser number of candidates examined.

Inspection of Mining Accounts.

In accordance with the Standing Orders of Government, the annual inspection of the books and accounts of one of the Gold Mining Companies, *viz.*, Ooregum Gold Mining Company of India, Ltd., was conducted by the Comptroller to Government in association with the Chief Inspector of Mines. Everything was found in order.

As usual, the Resident Auditor, Messrs. John Taylor and Sons' Committee, placed the services of his Assistant at the disposal of the Comptroller and the inspection work was much facilitated by the help rendered by this officer and the Company's Accountant and our thanks are due to them in this behalf.

Inspection of Mines—Outside Kolar Gold Field.

The following blocks outside the Kolar Gold Field were inspected during the year:—

Kolar District.—		
Ganacharpur ...	Graphite ...	Government area
Doddur Karpanhalli ...	Kaolin .	Prospecting License No. 732
Mysore District.—		
Shinduvalli ...	Chrome ...	Mining Lease No. 147
Talur ...	Do ...	Government area
Dodkanya ...	Chrome and Magnesite ...	Mining Lease No. 150
Tumkur District.—		
Sondenhalli (Solid Hill)	Manganese ...	Mining Lease No. 168
Dodguni and Shivasandra ...	Do ...	Do 169
Karekurchi ...	Do ...	Do 170
Beerasandra ...	Soapstone ...	Collecting License No. 110
Hassan District.—		
Sunkadhalli ...	Chrome ...	Mining Lease No. 172
Pensamudra ...	Do ...	Do 174
Shimoga District.—		
Shankargudda ...	Manganese ...	Mining Lease No. 141
Kumsi ...	Do ...	Do 142
Kumsi and Choradi ...	Do ...	Prospecting Licenses Nos. 729 and 723

The manganese blocks held by the Peninsular Minerals Co. of Mysore in the Tumkur District, *viz.*, Sondenahalli, Shivasandra and Karekurchi were surrendered to Government. Likewise the United Steel Cos., Ltd., surrendered all the mining and prospecting blocks held by them in the Shimoga District. The protective works carried out on these blocks were inspected and being found fairly satisfactory, release cirtificates were issued in respect of them in accordance with the Mining Rules.

The workings on most of the other blocks were generally satisfactory except in a few cases where necessary action was taken to remedy the defects noticed.

II. Labour Employed.

The total number of persons employed in the Mining Industry in 1931 was 19,109 as against 18,925 in the previous year showing an increase of 184.

Of this number, 18,388 were employed in gold mining against 17,312 in 1930, 92 on manganese against 330, 294 on chromium against 840, 145 on iron ore against 220, 130 on limestone against 130, 25 on magnesite against 66, 15 on kaolin against 12 and 20 on soapstone against 15.

Of the 18,388 persons employed in gold mining, 341 were Europeans, 400 Anglo-Indians and 17,647 Indians, a total of 9,954 being employed below ground and 8,434 on surface; of the latter, 1,089 were women and 446 children under 12 years of age.

The working hours underground and on surface remain the same as in the previous year. The average wages paid to different classes of European and Indian employees per month are embodied in Table 5 attached to this report.

The following statement gives the average number of hours worked and the average earnings per person per week for 1931 in respect of labour employed by the Gold Mining Companies and their Allied Departments on the Kolar Gold Field :—

Average number of hours worked per person per week		Average weekly earnings per person	
Underground	Surface	Skilled	Unskilled
		Rs. a. p.	Rs. a. p.
46	55	8 0 6	3 9 4

The supply of labour is adequate and all the amenities of life have been reasonably provided for. The relationship between the employer and employee is, on the whole, satisfactory.

Labour Enquiry.

The Report of the Special Officer appointed by Government to enquire into the labour conditions on the Kolar Gold Field has since been published and the various recommendations made by him in regard to the improvement in housing, service gratuity, creation of certain amenities of life and other points are engaging the attention of the Mine Management and many of the recommendations have already been given effect to.

Welfare Work.

All the five mines have had a welfare policy for their employees, but early last year it was decided to entrust all welfare work on the Field to a Central Committee, under the supervision of a European Welfare Officer. Each Mine has a Welfare Committee consisting of the Superintendent of the Mine with 8 others, both Indian and European workers, of whom 75 per cent are Indians with the Welfare Officer *ex-officio* member. These Mine Committees bring forward any suggestions or improvement they consider necessary in consultation with the workmen themselves. Any policy which may affect the welfare work of other mines is brought before the Central Committee with the idea of standardising expenditure and, if necessary, the sanctioning of financial aid. These Welfare Committees meet once a month.

Housing, improvement in living conditions, sanitation, facilities for bathing and washing, lighting, day and night schools, recreation halls, organisation of lectures on temperance, domestic economy, thrift, hygiene, etc., scouting, laying out parks and playgrounds, games, electric gramophones with amplifiers and maternity and child welfare are some of the subjects in which these Welfare Committees are interesting themselves. It is gratifying to note that commendable progress has been made under every one of the above mentioned items which the employees appreciate and feel thankful for. With the welfare work that is being done for the labourer to improve his living conditions and surroundings by providing amusement in his leisure hours close to his hut, it is hoped to wean him from the drink evil and money lender, if possible.

Miners' Phthisis.—The Committee of Medical Men appointed to study and report upon Pneumonokoniosis or Miners' Phthisis and other occupational diseases is still continuing its investigations and certain data collected so far has been sent to London for expert opinion, the receipt of which is awaited.

III. Accidents.

(*a*) Statistics for the year 1931.

The total number of accidents reported during the year 1931 was 200 against 186 in the previous year:—

Of these accidents:—

	35	were fatal,
	160	serious and
	5	non-mining.
Total ...	200	

The total number of fatal and serious accidents was therefore 195 which works out at the rate of 10·20 per 1,000 persons employed.

The corresponding figure for the year 1930 was 184 giving a rate of 9·72 per 1,000 persons employed.

Enquiries were instituted into all the 195 accidents reported to this Department and 70 inspections were made in connection with accidents of more than ordinary importance.

Of the above 195 accidents:—

22 or 11·28 per cent were due to negligence,
10 or 5·13 per cent were due to recklessness and
163 or 83·59 per cent were classed as unavoidable.

The corresponding figures for the year 1930 were:—

14 or 7·61 per cent were due to negligence,
12 or 6·52 per cent were due to recklessness and
158 or 85·87 per cent were classed as unavoidable.

In the 35 fatal accidents, 131 persons were either killed or died from the result of injuries received, giving a mortality of 6·85 per 1,000 persons employed against a mortality of 2·12 per 1,000 persons employed during the year 1930.

The death rate in the Gold Mines which as usual employed the largest proportion of the labour was 7·12 per 1,000 against 2·31 per 1,000 in 1930. This abnormally high death rate was due to a disastrous fire accident in Nundydroog Mine involving a loss of 53 lives.

Of the 35 fatal accidents in 1931:—

29 or 82·86 per cent were unavoidable,
2 or 5·71 per cent were due to recklessness and
4 or 11·43 per cent were due to negligence.

There were 12 individual accidents involving two or more fatalities, 5 of these occurring in Mysore Mine, one in Champion Reef Mine, 4 in Ooregum Mine and 2 in Nundydroog Mine.

In these 12 cases 108 persons lost their lives compared with 6 and 16 respectively in 1930, 4 most serious of them accounting for 88 fatalities.

In the 15 separate accidents due to rockbursts, 59 persons were killed compared with 10 and 18, respectively, in the previous year. Of the above, 6 took place at Mysore Mine, one at Champion Reef, 6 at Ooregum and 2 at Nundydroog.

Only one fatal accident due to explosives occurred underground involving the death of one person against three and five, respectively in the previous year. It was due to a breach of rules Nos. 126 and 127 of the Mysore Mining Rules.

Falling away in shafts, winzes and stopes from various causes accounted for 12 fatalities in 12 separate accidents as against 5 and 5, respectively, in the previous year.

Classification of Accidents in 1931.

		Fatal accidents	Non-fatal accidents	Deaths	Serious injuries
1.	Rockbursts	15	35	59	57
2.	Falls of ground	...	3	...	3
3.	Falling in shafts, stopes, etc.	11	6	11	6
4.	Explosives (misfires, etc.)	1	8	1	12
5.	Trucks and Tramways	1	15	1	15
6.	Run over or struck by skips or cages, etc. ...	...	1	...	1
7.	Hoisting	2	6	2	10
8.	Other machinery	1	3	1	3
9.	Falls of rock and materials in shafts, stopes, etc.	2	28	2	28
10.	Ropes and chains breaking	...	...	...	...
11.	Fire hazard	1	...	53	6
12,	Other causes	1	55	1	55
	Total ...	35	160	131	196

Non-casualty accidents reported under Rule 165 of the Mysore Mining Rules.

There were 14 accidents reported under this head, caused as follows:—

(1) Engine running out of control	0
(2) Fracture of essential part of winding engine, crank shaft, couplings, bearings, gearings, clutch drum or drum shafts	0
(3) Fracture of winding rope or its attachments to skip, cage or drum ...	0
(4) Fracture of pit-head sheave or axle	0
(5) Failure of efficiency of brake	0
(6) Fracture of safety catch to act when required	0
(7) Failure of device for prevention of overwinding or of detaching hook to act when required	0
(8) Overwinding of cage or skip	14
(9) Bursting of anything containing steam, compressed air or other substance at high pressure	0
Total ...	14

Out of a total of 14 overwinds which occurred during the year, 11 were in connection with electric hoists and 3 in air hoists. All these overwinds were due to carelessness on the part of the drivers, one of whom was dismissed, one reduced from 1st class to 2nd class, one suspended for four months, eight were fined—ranging from Rs. 2 to 15—and 3, being first offenders, were cautioned.

(b) Compensation for Fatal and Serious Accidents in Mines on the Kolar Gold Field for the year 1931-32.

During the year 143 claims for compensation comprising 80 fatal, 2 permanent total disablement and 61 permanent partial disablement arose as a result of accidents in the Mines on the Kolar Gold Field and the compensation awarded under all the above heads amounted to Rs. 1,17,984-8-0 as against Rs. 88,441-15-0 disbursed in the previous year. This represents the amounts actually paid during the year excluding those pending settlement at the close of the year. Besides the above, compensation amounting to Rs. 13,360-1-0 was paid in cases of temporary disablement in pursuance of section 4(d) of the Workmen's Compensation Regulation as compared with Rs. 17,411-15-0 paid in the previous year.

An extract from the report of the Commissioner on the administration of the Workmen's Compensation Regulation on the Kolar Gold Field during 1931-32 is published in Appendix I of this report.

The following statement shows the number of fatalities, cases of permanent and temporary disablement and compensation paid therefor by the Mining Companies on the Kolar Gold Field during the year 1931-32 :—

Mine	Number of				Compensation paid				
	Fatalities	Cases of Permanent Total Disablement	Cases of Permanent Partial Disablement	Cases of Temporary Disablement *	Fatalities	Permanent Total Disablement	Permanent Partial Disablement	Temporary Disablement	Total
					Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Mysore ...	22	...	18	504	15,554 6	...	6,483 9	3,606 14	25,644 13
Champion Reef ...	13	...	10	319	6,942 8	637 7	5,920 9	2,350 6	15,256 14
Ooregum ...	25	1	18	399	15,652 8	840 0	7,169 7	4,221 15	27,883 14
Nundydroog ...	5	...	11	378	41,687 8	1,253 0	5,796 2	2,135 8	50,872 2
Balaghat ...	†15	1	4	126	6,930 0	1,680 0	2,037 8	947 15	11,595 7
Allied Departments.	...	...	...	10	...	...	...	97 7	97 7
Total ...	60	2	61	1,736	86,766 14	4,410 7	26,807 3	13,360 1	131,344 9

* Only such disablement as lasts for more than ten days is shown in the above.

† Includes one non-mining case.

Amounts actually paid during the year have been shown in the statement excluding those pending settlement.

(c) Notes on accidents during the official year 1931-32.

There were 13 accidents involving the loss of two or more lives during this period resulting in a total of 46 fatalities against 6 such accidents and 90 deaths during the previous year. Of these, 10 were due to rockbursts causing 38 deaths, two of them alone being responsible for the loss of 18 lives, and the other eight deaths were due to two cage accidents and the collapse of a pigstye.

Cause	No. of accidents	No. of fatalities
Unavoidable	10	38
Negligence	2	6
Recklessness	1	2
Total ...	13	46

ROCKBURSTS.

There were in all 19 accidents from this cause including those mentioned above involving 47 fatalities; single deaths occurred in nine accidents and in the remainder, two or more fatalities occurred. Rockbursts were responsible for 60 per cent of the total deaths during the year in spite of the precautions taken to minimise their effects.

Accident No. 31 of 1932.—The worst accident of the year involving the loss of 11 lives occurred in the sink of No. 1 Deep Level Main Winze, Balaghat Mine, on the 20th February 1932. At the time of the accident a gang of muckers were engaged in hoisting broken rock from the sink which was 136 feet below the 53rd level. After 31 buckets of stuff had been raised, a very heavy rockburst occurred in the sink and buried all the persons present in it at the time. Four were immediately rescued alive while the rest could not be seen as they were completely entombed. By continuous rescue work the bodies of nine persons were recovered on the following day and in the interval two of the injured men sent to hospital died making a total of 11 deaths.

The Deep Level Main Winze, an ellipsoid in plan and concrete lined 15′, 2″ × 12′, 4″ in the clear, is divided into two cage roads, a ladder compartment and a sinking bucket road. It is in commission from the 44th level and had been lined with concrete to within 13 ft. of the sink. The north-east corner of the shaft lining had been blown out for an area of 6′ × 6′ and above this the concrete had been shattered and cracked to a height of 7 ft. The unprotected ground between the sink and the concrete had been dislodged all round for a thickness of 2 ft. to

3½ ft. One peculiar feature of this burst was that the bottom of the sink was blown upwards and some of the jumpers which were on the floor of the sink before the accident were later found on top of the debris.

This shaft was sunk without any mishap for about 1,000 ft.; the usual practice being to sink 20 ft. at a time and then put in the permanent concrete lining right down to the sink before continuing further sinking. But, while passing below the 53rd level, the ground showed signs of "spitting off" occasionally and to counteract it the strength of the concrete was increased by improving the mixture, the shape of the shaft was also altered to a perfect ellipse by rounding off the corners of the old shape, the thickness of the concrete was also increased from 1′ 8″ to 2′ 6″ and the sinking depth was reduced to 15 ft. at a time. In spite of these precautions this violent burst occurred with disastrous consequences. This rockburst was both heard and felt on surface at the time. It is believed that a water course met with in the 53rd level and expected to be cut in the shaft is in some way responsible for this burst.

Accident No. 107 of 1931.—This accident was due to a pillar burst which resulted in the death of seven handjumper coolies who were at work on a stope face below the 68th level S., Bullen's Incline Shaft, Ooregum Mine. The working face was 36 feet long with an average width of 4 feet and was 50 feet below the level. The excavation was supported with cribs to within 10 feet of the working face and coverings had been fixed to protect workmen against objects falling from above. The hanging wall in the chute end was blown out for a length of 15 feet below the line of cribs, the rest of the stope was unaffected. About 25 tons of rock was dislodged and as all the men were concentrated at the point of the stope at the time, they were all killed. The excavations above and below this pillar of ground had been systematically supported with granite packs and crib sets. The remaining portion of the pillar will be stoped by machine in preference to hand labour so as to reduce the number of men at work.

Accident No. 102 of 1931.—About 9-45 A.M. on the 22nd July 1931, a series of very heavy rockbursts occurred in Mysore Mine affecting a very large area of ground from the 32nd to the 45th level in the neighbourhood of Edgar's Shaft—the main artery of the mine. It is circular in shape, bricklined and vertical. The bricklining of the shaft had been knocked out in many places for a distance of 700 feet from the 32nd to the 39th level. The byatts fixed from north to south were unaffected and the east and west sides of the shaft alone suffered. Many levels in the vicinity of the shaft were blocked and at the 32nd level where three men were killed the back of the level was dislodged to a height of 10 feet bringing down the timbering with it. Heavy fall of ground at this particular place was due to the proximity of a large fault. At the 37th level a ventilation door was so squeezed that it could not be opened. All the damaged levels are being reclaimed by fixing tunnel sets.

This was a case of the failure of the shaft pillar which had been left intact for a considerable distance all round the shaft to a depth of over 700 feet. The stoped-out area had been adequately supported with waste rock packs. At the time of the collapse of this pillar, a very heavy burst occurred in the first instance followed by a number of smaller bursts, which continued to occur throughout the day till the equilibrium was restored.

Accident No. 164 of 1931.—This accident occurred in a sinking shaft. Edgar's Sub-Vertical Shaft—circular, bricklined, 18 feet in diameter—is being sunk from three different horizons 51st, 55th and 65th levels to expedite sinking operations. It is usually sunk for 50 feet at a time and then a three foot concrete ring is fixed and brick lining is continued upwards. On the morning of the 2nd November 1931, a number of coolies lowered in the bowk to the 76th level, were in the act of getting out of it when a very heavy rockburst occurred about 350 feet below the 65th level dislodging bricks and parts of the concrete ring. All the men in the bowk were injured and two were killed instantaneously and one died later in hospital. At the place where the burst occurred, the shaft had passed through a few stringers of quartz in the country rock and a thicker lining of bricks had been put in here as a precautionary measure and this saved more damage being caused by this burst. This shaft had been sunk without any mishap for a distance of 1,022 feet.

Accident No. 184 of 1931.—A mestri and three coolies were loading a skip with granite blocks at the 48th level plat, Auxiliary Main Winze, Mysore Mine, on the 4th December 1931, when a very heavy rockburst occurred in the shaft itself and buried all these men. This shaft had been sunk on the reef in the northernmost ore shoot of the mine between the 45th and the 51st levels and 70 feet of the shaft was smashed up and filled with debris and the 48th level South of the shaft was blocked for 100 feet. The rescue work had to be carried on from underneath the block under trying conditions. The mestri, who was found with his right leg caught between a shaft timber and a large slab of rock with his right leg hanging down the shaft and his body in the skip, was rescued alive after the lapse of 20 hours but the others perished. One of them was recovered on the following day while it took 20 days to get the last two bodies out. All stoping work in this area was stopped after this accident and work is now concentrated in repairing the damage done.

Accident No. 33 of 1932.—As a result of the continuous rill-stoping of a block of ore, 150 ′ x 90 ′, between the 64th and the 65th levels S., Carmichael's Secondary Shaft, Champion Reef Mine, a roughly triangular remnant, 50 feet in length, was left. A length of 25 feet of this pillar was taken out from the south end to a depth of 8 feet and filled in with mass concrete to secure the level and the excavation below the pillar had been filled with waste rock and sand. Arrangements were made to work this remnant as a bottom stope and a machine mestri and his cooly were working at the south end of the pillar when a very heavy rockburst occurred and blocked the level on both sides of the pillar entombing the two persons whose bodies were recovered eight days later.

One remarkable feature of this accident was that the burst was felt like a quake and it was followed by intermittent bursts of lesser intensity which continued for 45 minutes. The first of them was the heaviest and the Seismographs at the Observatory recorded the following movements of styles:—

North-South 9·7 m/m. East-West 10·4 m/m. Vertical 3·7 m/m.

All the other accidents due to rockbursts are of ordinary nature and do not call for any special remarks.

Hoisting.

Two fatal accidents occurred while persons were being raised and lowered in cages resulting in the death of three persons in each case. One was due to the derailment of the cage in an inclined shaft and the other was caused by bumping the cage violently against the keps in a vertical shaft.

Accident No. 18 of 1932.—On the morning of the 1st February 1932, while a three decked cage containing nine persons in each deck was being lowered from the 42nd to the 73rd level in Bullen's Incline Shaft, Ooregum Mine, it struck an obstruction—a jumper (steel)—and derailed. It bumped violently against the shaft timbers, damaged the cage doors and caused them to open of themselves. Of the 27 persons in the cage, two were killed instantaneously while a third person died later in hospital. The enquiry held into this case showed that the accident was due to the practice of handling loose steel jumpers in the shaft, which has since been discontinued and a safer method adopted.

Accident No. 49 of 1932.—Heathcote Shaft, Champion Reef Mine, oval and lined in concrete, is equipped with double decked cages with a carrying capacity of 30 persons in each deck. They are provided with doors with latches outside. The bottom deck is designed to carry two ore trucks and at all loading stations keps operated by a hand lever are fixed in the shaft. On the morning of the 17th March, raising and lowering of persons was in progress between the 40th and the 74th level. About 8 A.M. while the south cage containing persons was being lowered from the 40th level to the 74th level, the ascending North cage was stopped at the 70th level for sending up a jumper truck. The selfacting type of 'keps' actuated by counterbalancing weights were drawn into the roads as usual for the cage to sit on to facilitate loading of the jumper truck. Immediately after the cage is raised the keps should fly back to clear the roads, but on this occasion they did so only partially with the result that the descending south cage bumped violently against them, in consequence of which three persons were thrown out of the cage into the shaft and killed.

To prevent similar accidents occurring in future, the "kep gear" is connected electrically with coloured lights in front of the driver's platform to indicate their position and warn him against obstructions in the cage roads.

Explosives.

There were four fatal accidents involving four fatalities due to drilling into or intersecting sockets. Three of them occurred in the Kolar Gold Field, while the fourth happened in Shinduvalli Mine, Mysore District. The certificates of mestris responsible for three of these accidents were suspended, while the person responsible for the accident in the Shinduvalli Mine was prosecuted. This case is pending with the Magistrate.

Falling in Shafts, Winzes, Stopes, Etc.

There were 13 accidents involving fourteen deaths during the year as against seven accidents and seven deaths, respectively, during the previous year. Of these, seven were due to unavoidable causes and the remaining six to recklessness or negligence of the deceased themselves. The details of these accidents are:—

In one case, a cooly attempting to cross over the roads in a vertical shaft slipped and fell 75ft. Two coolies fell down while climbing ladders in a stope and a shaft, respectively. A block of granite stone rolled down an incline shaft and struck a person on the head; a person working in the skip roads was knocked down the shaft by a descending skip.

While working close to the chute ends in stopes, three coolies fell down the chute passes and were killed. While riding up in a cage two persons were thrown out of the cage and one of them fell down the shaft. While getting out of the bucket in a sinking shaft one man lost his hold and fell into the sink; in another case a cooly, while opening a door covering a bucket road, slipped and fell down the winze. A shaft man working on a stage in a vertical shaft overbalanced and fell into the shaft. While stripping a winze of its timber work, the sets suddenly collapsed and a cooly who had neglected to wear the life-belt fell down and lost his life. A handjumper cooly presumably walked in the dark into an open winze and fell 100 ft., death being instantaneous.

Cases of Neglected Injuries.

During the year, 15 cases of neglected injuries were reported to this Department. Of these one proved fatal as septicæmia supervened as a result of septic arthritis following wound of left knee. This workman did not attend hospital until six days after the accident and succumbed nine days after admission. In the majority of cases treated, the period of neglect varied from one day to fifteen days. In spite of the best medical aid available in the Companies' hospital, cases of neglected injuries continue to occur as no hospital pay is allowed for an injured person for the first ten days of his stay in hospital in accordance with the provisions of the Workmen's Compensation Regulation. Owing to this circumstance the labourer prefers to be at work, though injured, instead of losing his wage by attending hospital. The question of reducing the waiting period from ten days to seven days is engaging the attention of the authorities concerned.

IV. Meteorology and Seismology on the Kolar Gold Field.

The following has been taken from the report for the year 1931 by Mr. H. A. Martin, Meteorologist, kindly furnished to this Department by Messrs. John Taylor & Sons' Committee, Oorgaum.

Meteorology.

Observations were taken daily at 8, 10 and 16 hours and tabulated.

Temperatures.—The highest dry and wet bulb temperatures recorded during the year were 103·8°F and 75·3°F, respectively, while the lowest were 54·5°F and 52·0°F, respectively. Their mean values were 0·8°F and 0·9°F, respectively above normal.

The reading of 103·8°F obtained on 21st May constitutes a record high shade temperature for the Kolar Gold Field.

Rainfall.—The rainfall for the year was low, the total registration being 24·59 inches as against a normal of 31·07 inches over a 23 year period. The greatest amount recorded in 24 hours was 1·80 inches on the 30th May.

SEISMOMETRY.

Throughout the year, the seismographs have been kept in good working order and instrumental failures have been few as compared with the previous year.

Classification of Rockbursts.—No alteration has been made in the system of classification so that the figures can be readily compared with those issued for previous years.

The total number of bursts recorded during the year was 3,580 as against 2,322 in 1930.

Displacement in Millimetres	Number of Rockbursts 1931	Normal (mean)	Departure
Less than 1·0	2,905	1,837	+1,068
Between 1·0— 2·0	418	193	+225
Between 2·0— 3·0	116	44	+72
Between 3·0—10·0	111	41	+70
Between 10·0—20·0	9	9	0
Over 20·0	11	10	+1
Those in which one or more styles were thrown off	10	5	+5
Total ...	3,580	2,139	1,441

The following table shows the total number of bursts of 1 m/m. displacement and upwards during the years of observation :—

Year	Total	Year	Total
1912	127	1922	303
1913	192	1923	282
1914	200	1924	328
1915	238	1925	445
1916	229	1926	337
1917	90	1927	341
1918	106	1928	295
1919	132	1929	446
1920	253	1930	693
1921	322	1931	675

Average for 1912—1931=302.
Excess over average in 1931=373.

It may be said that for the past twelve months "slight" bursting shows a marked increase whilst in the "Medium" to "Heavy" classes there has likewise been a pronounced excess over normal.

Earthquakes and Tremors.—The following table shows the number of shocks recorded during 1931 together with the normal and departure therefrom :—

	1931	Normal	Departure
Earthquakes ..	42	29	+13
Tremors ...	397	255	+142

Ground Tilting at the Observatory.—Wanderings of the zero settings of the instruments have been continually measured and recorded.

During 1930, the ground over the hangingwall of the workings acquired a pronounced tilt in a direction almost due west and throughout 1931, this tilt has steadily increased implying a slow but continual sag westward over the hangingwall of the workings.

V. Underground Air Temperatures.

The deepest workings on the Kolar Gold Field over 7,000 feet vertically below Field datum are in Champion Reef and Ooregum Mines and the rock temperature

at this depth, recorded in a hole six feet deep specially made for the purpose, is 124·2°F. It will be seen from the following statements that the air temperature in some of the deep level workings and at other places also is generally very dry compared with that obtaining underground on the Rand Mines. This is due to the dry and wet methods of mining practised at the two places respectively. The rockdust produced in Kolar Gold Field Mines being generally less innocuous owing to the low percentage of free silica present in it, the necessity to practise complete wet mining has not arisen here. On the other hand, owing to the prevalence of high rock temperature underground, cases of "Heat exhaustion"—quite different from "Heat stroke" cases met with in Rand Mines due to increased humidity—occur amongst the workmen. Some of them occasionally get exhausted and faint underground but they soon recover on removal to a well ventilated place or after a short stay in hospital under proper medical supervision. Fatalities from this cause are very rare.

There were 22 cases from this cause during the year as against 16 cases in the year previous; seventeen of them were due to excessive heat at the working place, one to general debility, two to non-acclimatisation and two to other causes. All of them were trivial.

UNDERGROUND AIR TEMPERATURES—1931.

Field Datum, 2,967 feet above sea level (Madras).

Downcast						
Names of Shafts and Stations	Vertical depth below Field Datum (feet)	Dry Bulb F°	Wet Bulb F°	Difference	Relative humidity per cent	Grains of water vapour per lb. of dry air
MYSORE GOLD MINING COMPANY, LIMITED.						
Edgar's Shaft collar	18	70·9	66·1	4·8	76·8	97·7
Do 39th level plat	2,588	83·0	73·3	9·7	64·0	107·8
Do 51st do	3,709	88·5	77·0	11·5	58·0	115·5
Air Shaft, 55th plat	4,103	90·7	81·5	9·2	65·0	139·6
Do 76th plat.	6,183	108·0	89·2	18·8	45·4	154·4
Edgar's Auxiliary 76th plat	6,183	107·1	89·9	17·2	48·6	161·8
CHAMPION REEF GOLD MINES OF INDIA, LIMITED.						
Gifford Shaft collar	24	72·9	66·2	6·7	69·2	94·4
Do 40th level crosscut ...	3,670	90·0	74·8	15·2	47·6	100·4
Carmichael's 40th level plat	3,670	90·3	76·6	13·7	52·6	110·0
Heathcote Shaft 70th level plat	6,580	106·3	83·0	23·3	35·4	109·9
Do 74th do	6,980	107·0	90·0	17·0	50·0	158·0
OOREGAUM GOLD MINING COMPANY OF INDIA, LIMITED.						
Bullen's Shaft collar	108	76·3	69·7	6·6	71·0	109·9
Bullen's Incline 42nd level plat	5,811	94·4	80·6	13·8	53·8	129·9
Do 70th level crosscut ...	6,427	106·2	88·4	17·8	47·4	150·6
Do 73rd do ...	6,727	105·6	89·0	16·6	49·8	154·8
NUNDYDROOG MINES, LIMITED.						
Henry Shaft collar	111	73·1	65·6	7·5	66·0	90·8
Do 48th level plat	4,199	94·4	77·1	16·3	45·4	105·9
Number 2 Auxiliary, 51st level crosscut ...	4,487	93·4	81·3	14·1	54·0	128·8
Number 1 do drive N. end...	4,489	100·1	83·1	17·0	48·0	133·2

Upcast						
Names of Shafts and Stations	Vertical depth below Field Datum (feet)	Dry Bulb F°	Wet Bulb F°	Difference	Relative humidity per cent	Grains of water vapour per lb. of dry air
MYSORE GOLD MINING COMPANY, LIMITED.						
Rowse's Auxiliary Shaft, 44th plat ...	2,963	92·7	86·5	6·2	76·6	180·3
Rowse's No. 2 Auxiliary Shaft 57th plat ...	4,303	103·3	87·3	16·0	51·0	159·0
Do do 76th plat ...	6,183	112·6	91·2	21·4	44·0	162·2
Ribblesdale's No. 2 Auxiliary 76th plat ...	6,185	108·7	90·5	18·2	48·5	163·4
CHAMPION REEF GOLD MINES OF INDIA, LIMITED.						
Glen's 40th level plat	3,670	90·3	83·3	7·0	74·0	155·9
63rd level Ventilation Winze North ...	5,902	107·3	87·5	19·8	42·5	143·7
Garland's Shaft 40th level Fan Chamber ...	3,670	95·0	84·8	10·2	64·6	158·8
Glen's Main Winze, 70th plat	6,580	106·4	84·2	22·2	38·6	118·2
59th level N. upcast	5,513	104·5	86·9	17·6	46·8	145·7
OOREGAUM GOLD MINING COMPANY OF INDIA, LIMITED.						
Circular Shaft collar	98	81·2	76·7	4·5	81·0	145·5
Auxiliary Shaft 62nd level	5,726	101·8	87·7	14·1	53·8	157·4
Do 70th level	6,428	111·1	92·3	18·8	47·0	173·7
Do 60th level	5,526	107·6	86·5	21·1	40·5	138·9
Circular Shaft 32nd level Heading ...	2,880	92·2	81·4	10·8	61·1	144·4
NUNDYDROOG MINES, LIMITED.						
Taylor's Section, 51st level	4,487	100·7	85·1	15·6	50·8	146·6
Do 50th level	4,368	102·3	85·1	17·2	47·6	144·5
Do 51st level west crosscut ...	4,487	99·4	84·6	14·8	52·4	145·9
Richards' Incline 2,000' plat	1,750	81·4	78·5	2·9	87·4	147·9
Richards' Vertical Shaft 2000' plat ...	1,750	86·8	81·5	5·3	78·8	160·6

COMPARATIVE STATEMENT OF TEMPERATURE AND RELATIVE HUMIDITY OF ATMOSPHERE IN DEEP LEVELS AND SOME OF THE WORKING PLACES THEREIN.

Field Datum is 2967·21 feet above sea level (Madras).

Locality					Development points and Stopes					
Horizon	Vertical depth below Field Datum (feet)	Dry Bulb F°	Wet Bulb F°	Difference	Relative Humidity per cent	Place of work	Dry Bulb F°	Wet Bulb F°	Difference	Relative Humidity per cent	Remarks
OOREGAUM GOLD MINING COMPANY OF INDIA, LIMITED.						OOREGAUM GOLD MINING COMPANY OF INDIA, LIMITED.					
56th level N. Bullen's Shaft	5,153	101·0	82·0	19·0	43·0	Stope above 56th level N. Bullen's Incline ...	105·0	88·0	17·0	49·0	30 feet above level.
64th level N. Do	5,897	110·0	87·0	23·0	38·0	No. 22 stope above 64th level N. do ..	111·0	87·0	24·0	37·0	15 Do
67th level N. Do	6,178	111·0	87·0	24·0	37·0	No. 8 stope above 67th level N do ...	108·0	89·0	19·0	45·0	20 Do
67th level S. Do	6,178	107·0	86·0	21·0	40·0	No. 38 stope below 67th level S. do ...	109·0	89·0	20·0	44·0	10 feet below level.
68th level N. Do	6,278	109·5	87·0	22·5	39·0	Stope below 68th level N. do ...	107·0	91·0	16·0	56·0	30 Do
70th level N. Do	6,427	109·0	87·0	22.0	40·0	Stope below 70th level N. do ...	109·0	8·80	21·0	41·0	15 Do
73rd level S. Do	6,703	107·0	88·0	19·0	45·0	Drive 76th level N. down No. 2 Winze ...	108·0	9·60	12·0	63·0	40 feet N. of No. 2 Winze S. Bullen's Incline.
73rd level N. Auxiliary Shaft	6,727	109·0	89·0	20·0	44·0	Drive 76th level S. down No. 5 Auxiliary Winze.	109·0	93·0	16·0	54·0	20 feet S. of No. 5 Winze.
62nd level N. Oakley's No. 2 Vertical ...	5,726	104·0	91·0	15·0	59·0	No. 16 stope below 62 N. Oakley's No. 2 Vertical.	104·0	95·0	9·0	71·0	50 feet below level.
70th level N. Auxiliary Shaft	6,427	106·0	89·0	17·0	50·0	Stope above 70th level N. Auxiliary Shaft ...	108·0	95·0	13·0	60·0	25 feet above level.
CHAMPION REEF GOLD MINES OF INDIA, LIMITED.						CHAMPION REEF GOLD MINES OF INDIA, LIMITED.					
45th level S. Glen's Shaft	4,132	92·0	91·0	1·0	96·0	Stope above 45th level S. Glen's Shaft ...	93·0	91·0	2·0	92·0	35 Do
59th level N. Carmichael's Shaft	5,518	104·0	87·5	16·5	50·0	Rill stope above 60th level N., Carmichael's Shaft.	103·0	88·0	15·0	53·0	
67th level S. Do	6,276	103·0	88·0	15·0	53·0	Rill stope above 67th S. do do ...	106·0	90·0	16·0	52·0	
69th level N. Do	6,476	104·0	90·0	14·0	56·0	Do above 69th N. do do ...	105·0	90·0	15·0	54·0	
70th level N. Do	6,580	105·0	89·5	15·5	53·0	Do above 70th N. do do ...	106·0	92·0	14·0	57·0	
70th level S. Heathcote Shaft (End of drive)...	6,580	106·0	95·0	11·0	65·0						
71st level S. North Development Winze ...	6,680	105·0	89·0	16·0	51·0	Rill stope above 71st S. North Development Winze.	105·0	91·0	14·0	57·0	
71st level S. South Do do ...	6,680	109·0	93·0	16·0	54·0	Sink of No. 4 Winze below 71st S. South Development Winze.	101·0	91·0	13·0	59·0	74 feet below 71st.
74th level S. Do do ...	6,980	107·0	89·0	18·0	47·0	74th level S. South Development Winze—dead end.	115·0	94·0	21·0	47·0	Drive being advanced.
74th level N. Do do ...	6,980	110·0	91·0	19·0	47·0	75th level N. drive down No. 2 Winze ...	112·0	93·0	19·0	47·0	

N.B.—The annual mean values of dry and wet bulb temperature on surface were 76·3°.F and 665°F respectively which represents an excess of 1·2°F and 0·9°·F over the corresponding figures for the previous year.

VI. Prosecutions.

(a) In connection with thefts, etc., of Mining Materials.

The following statement shows the number of cases dealt with during the year 1931 by the Special First Class Magistrate, Kolar Gold Field, in connection with the theft and illegal possession of mining materials under section 6 of the Mysore Mines Regulation as compared with 1930:—

Year	Number of cases	Number of persons put up	Number of persons convicted	Value of property recovered
				Rs. a. p.
1931	37	44	40	1,518 8 0
1930	50	55	45	2,190 15 0

The following table shows the various kinds of mining materials in respect of which prosecutions were instituted during the year 1931:—

Kind of material	Number of offences dealt with	Number of persons charged	Number of convictions	Value of property recovered
				Rs. a. p.
Gold quartz	8	9	8	326 4 0
Auriferous tailings	5	5	5	17 3 0
Amalgam	4	8	6	7 12 0
Sponge gold	18	19	18	1,154 13 0
Explosives	2	3	3	12 8 0
Tools	...	...	...	.....
Candles	...	...	...	.....
Total ...	37	44	40	1,518 8 0

(b) In connection with breach of Rules, Accidents, etc.

The following is a comparative statement for the years 1931, 1930 and 1929:—

	1931	1930	1929
Number of cases	15	24	27
Number of persons put up	27	43	28
Number of persons convicted	23	41	28
Number of persons acquitted	1	...	...
Number of persons discharged	3	1	...
Number of persons not found	...	1	...
Number of cases pending	...	...	...

Of the above 15 cases, three were put up under the Indian Penal Code and 12 under the Mysore Mines Regulation. The penalties in the case of convictions ranged from fines of Rs. 2 to Rs. 25 and imprisonment from one day to two months.

During the year, four persons were prosecuted for breaches of the Mines Regulation and Rules framed thereunder resulting in accidents and all of them were convicted.

Less serious offences committed in connection with 28 accidents entailed departmental punishment of 29 persons who were either fined or had their certificates suspended or cancelled.

Similarly, ten other persons were dealt with departmentally for offences not resulting in accidents.

E.—EXPLOSIVES SECTION.

(*Calendar year 1931.*)

Number of licenses issued.—During the year, nine licenses in Form J. were granted by Government under Articles 12 and 13 of Schedule I, Mysore Explosives Rules, for the possession of specified explosives (other than fulminates) in and sale from, a magazine as against the same number granted in 1930. The actual number of magazines inspected and in use is far in excess of this figure, each gold Mining Company having two or more magazines included under one license in accordance with Rule 94, Mysore Mining Rules; all these have been inspected.

Altogether, 694 licenses were issued by the District Magistrates under the remaining Articles of Schedule I in Forms A, B, C, D, E and F for the manufacture, possession and sale of explosives, 44 less than in the previous year.

In all, 703 licenses were granted throughout the State for the year compared with 747 during 1930, a decrease of 44 licenses. This is due to a small decrease in the number of licenses issued by the District Magistrates under each of the various Forms mentioned above.

The following statement shows the distribution of licenses in the several Forms among the Districts for the year :—

District	Forms								Total for 1931	Total for 1930
	A	B	C	D	E	F	J	K		
1. Bangalore ...	8	78	...	...	54	...	1	..	141	161
2. Kolar ...	6	39	...	...	49	...	6	...	100	102
3. Tumkur ...	5	16	...	...	28	...	...	...	49	65
4. Mysore ...	8	48	...	...	25	..	2	...	83	63
5. Hassan ...	6	29	...	18	31	1	..	...	85	97
6. Shimoga ...	25	62	...	2	13	...	..	...	102	94
7. Kadur ...	16	47	2	2	35	...	...	...	102	116
8. Chitaldrug ...	9	20	...	...	12	...	..	...	41	49
Total ...	83	339	2	22	247	1	9	...	703	747

Observations on the issue of licenses by the District Magistrates.—It is gratifying to note that the repeated endeavours of this Department have resulted in minimising cases of issue of licenses on wrong forms, licensing larger quantities of explosives than are allowed by the rules, charging excessive or insufficient fees, etc. However, there are certain irregularities still to be observed in the monthly returns from the districts, and these are promptly brought to the notice of the licensing authorities while at the same time the correct procedure to be followed is indicated.

Departmental inspection of Magazines and Premises.—All the main and subsidiary magazines included in the licenses granted by Government for the possession of specified explosives in bulk both on the Kolar Gold Field and outside and all the daily supply magazines at important shaft-heads have been inspected in detail during the year by the officers of this Department and the lightning conductors attached to them tested. The magazines are in good order and their upkeep and supervision well attended to. As usual, the companies have been found to be most willing to carry out any recommendations made and our thanks are due to them for making our duties easy in this respect.

Two new daily supply magazines constructed at the top of McTaggart's Vertical and Pilot Shafts, Mysore Gold Mine, were inspected and passed for the storage of explosives during the year.

In addition, some of the premises licensed for the manufacture, possession and sale of explosives in Bangalore and Mysore Cities were inspected by the officers of this Department during the year when the rules on the subject were explained to the licensees and safe methods of manufacture and storage advised.

Condition of Explosives.—The Physical condition of all explosives in the different magazines was found to be good.

Authorised Explosives.—A list of explosives at present authorised for importation into the State for general sale, adopted from the list of explosives authorised for importation into British India, is given in Appendix III.

Government Magazines in charge of Civil Officers (Public Works and Electrical).—Twelve reports of inspection of these magazines by the officers of the Public Works and Electrical Departments have been received in this office and any irregularities or defects which required remedying have been brought to the notice of the officers concerned.

The Public Works Divisional magazines at Mysore and Shimoga as also the magazine belonging to the Mysore Iron Works at Bhadravati were inspected during the year.

Inspection by the Magistracy and the Police.—The total number of inspections of explosives premises carried out during the year by the Magisterial and Police Officers empowered to conduct them under Rule 125, Mysore Explosives Rules, was 651 compared with 529, an increase of 122 inspections.

Two hundred and sixty-seven premises or 59·73 per cent of the total number licensed (447) excluding 247 "E" licenses issued for the possession of small quantities of explosives required *bona fide* for blasting purposes and the nine magazine licenses granted by Government that come under the direct supervision of the Chief Inspector of Mines in Mysore have been inspected by the District authorities.

The following table gives the number of licenses issued in the several districts during the year and the percentage of premises inspected in each during 1931 and the two previous years :—

District	Number of licenses issued during			Percentage of premises inspected during			Remarks
	1931	1930	1929	1931	1930	1929	
1. Bangalore ...	141	161	172	(a)24·42	29·03	26·80	1 Granted by Government.
2. Kolar ...	100	102	135	95·56	56·36	40·38	6 do
3. Tumkur ...	49	65	58	66·67	57·14	40·00	
4. Mysore ...	83	63	60	39·29	43·75	24·44	2 do
5. Hassan ...	85	97	101	51·85	28·57	39·22	
6. Shimoga ...	102	94	93	55·06	56·04	50·00	
7. Kadur ...	102	116	111	98·51	30·43	27·27	
8. Chitaldrug ...	41	49	64	82·76	71·43	62·07	
Total ...	703	747	794	(b)59·73	(b)43·17	(b)37·03	

(a) It is stated that 63 licenses in Form B were issued temporarily for the possession and sale of foreign crackers during the Deepavali season and that all these premises have been inspected.

(b) These percentages are obtained after excluding the magazine licenses brought under the direct inspection of the Chief Inspector of Mines in Mysore and the licenses in Form E (granted to contractors, cultivators and others) to possess small quantities of gunpowder and other explosives required for *bona fide* blasting purposes.

Theft of Explosives.—Two cases of theft of detonators from the annexe of the explosives magazine at Shinduvalli Mine were reported to this Department during the year. The first of them occurred on 9th April 1932 when 1,776 detonators were stolen and the second on 7th May 1932 when 800 detonators were stolen. The cases are reported to be under investigation by the Police.

The case of theft of explosives referred to in the last year's report was struck off as it remained undetected for more than a year.

Prosecutions for unlicensed manufacture of or dealing in Explosives.—There were 19 cases of prosecutions under the Mysore Explosives Rules during the year, 17 of them in connection with accidents. Two of these are still pending disposal. All the three cases that were pending disposal at the close of last year were disposed of, two resulting in conviction and one ending in acquittal.

In three out of the five cases in the Bangalore District, 3 persons were convicted for the unauthorised manufacture and possession of the highly dangerous and prohibited explosive "Bellulli Pattas" and gunpowder and sentenced to pay fines ranging from Re. 1 to Rs. 3. One other case ended in acquittal and the fifth case is pending disposal.

In the Mysore District, 7 persons were convicted in 7 separate cases—three for violating the conditions of their licenses and four for the unauthorised manufacture and possession of the dangerous "Bellulli Pattas" mixture and other explosives—and sentenced to pay fines ranging from Rs. 3 to Rs. 100 in each case. Of the three other cases, one was struck off the file as the accused has absconded, one ended in acquittal and the last is pending disposal.

A person was convicted and sentenced to pay a fine of Rs. 20 in the Tumkur District for the unauthorised possession of "Bellulli Pattas."

In one case in the Kolar District, the prosecution was ordered to be withdrawn by the District Magistrate.

Two cases of prosecution for violating conditions of licenses in the Chitaldrug District ended in the acquittal of the accused persons for want of sufficient evidence.

Accidents.—In all, there were reported to this Department during the calendar year 1931, 65 accidents due to explosives involving the death of 15 persons and serious and trivial injuries to 79 others. The corresponding figures for 1930 were 58, 14 and 76 respectively. Of the 65 accidents, 9 occurred on the Kolar Gold Field resulting in the death of one person and serious injuries to 12 others. Drilling into or intersecting sockets was the cause of the accidents in the mines.

A list of accidents with a brief account of each, which occurred outside the Kolar Gold Field Mining Area, is given in Appendix II.

Departmental action in connection with Accidents.—In all the 9 accidents that occurred on the Kolar Gold Field, Departmental action was taken. The mestris responsible for 8 of them were suspended from working as such for periods varying from 1 to 3 months and the two persons concerned in the other accident were fined Rs. 10 and Rs. 7-8-0 respectively.

Explosives Imported into the State.—The following statement shows the quantity of explosives imported into the State during 1931 compared with the previous year:—

Description			1931	1930	Increase	Decrease
Gunpowder	...	lbs.	11,495	10,183	1,312	...
Percussion Caps	...	No.	1,216,923	1,529,474	...	312,551
Dynamite	...	lbs.	121,000	162,550	...	41,550
Blasting gelatine	...	do	269,500	240,800	28,700	...
Gelignite	...	do	54,500	27,500	27,000	...
Safety Fuse	...	Coils.	171,000	260,500	...	89,500
Detonators	...	No	1,358,500	1,670,000	...	311,500
Dynamite Caps	...	do	...	500	...	500
Loaded Rifle cartridges	...	do	21,885	26,756	...	4,871
Do Gun do	...	do	55,032	108,503	...	53,471
Do Revolver do	...	do	1,050	2,650	...	1,600
Do Pistol do	...	do	500	400	100	...
Empty Rifle do	...	do	...	3,000	...	3,000
Do Gun do	...	do	9,050	14,100	...	5,050
Sulphur	...	lbs.	13,391	52,899	...	39,508
Blasting Powder	...	do	...	525	...	525

Explosives confiscated to Government.—No explosives were confiscated to Government during the year.

Enquiries.—A number of enquiries of a varied nature was received during the year from the District officials, private individuals and firms. These were all dealt with.

GENERAL.

Special rules for small mines.—A set of special rules framed under sections 21 and 37 of the Mysore Mines Regulation, IV of 1906, to govern Small Mines worked on the open cast system or by other methods was approved by Government and the same was published for general information in the year.

OOREGAUM, K.G.F.,
15th September 1932.

C. E. SURYANARAYANA RAU,
Chief Inspector of Mines in Mysore.

Statement of capital employed, etc., in Gold Mines working in the

1930

NAME OF MINING COMPANY	Nominal Capital £ Stg.	Shares: Number issued	Shares: Par Value-Shillings	Shares: December Prices Min.	Shares: December Prices Max.	Paid-up Capital: Per Share-Shillings	Paid-up Capital: Total £ Stg.	Dividends Paid: Amount £ Stg.	Dividends Paid: Percentage of Paid-up Capital	Fine Gold and Silver Produced: Mint Fine Gold Ounces	Fine Gold and Silver Produced: Value £ Stg.	Fine Gold and Silver Produced: Mint Fine Silver Ounces	Fine Gold and Silver Produced: Value £ Stg.	Fine Gold and Silver Produced: Total value of Fine Gold and Silver £ Stg.	Royalty Payable to Government: At 5 per cent on the value of gold and silver produced less refining charges £ Stg.	Royalty Payable to Government: At 2½ per cent on the dividends declared £ Stg.	Royalty Payable to Government: Total £ Stg.
A. DIVIDEND PAYING.													(a)				
ysore Gold Mining Company, Limited	610,000	1,220,000	10	10/9	11/9	10	610,000 0 0	76,250 0 0	12½	101,826·978	433,850 4 10	3,984·618	327 19 2	431,178 4 0	21,460 2 7	1,906 5 0	23,366 7 7
hampion Reef Gold Mines of India, Limited	260,000	520,000	10	6/9	7/9	10	260,000 0 0	26,000 0 0	10	62,642·457	265,216 2 3	3,862·680	348 8 2	265,564 10 5	13,205 14 1	650 0 0	13,855 14 1
oregum Gold Mining Company of India, Limited* ...	Ord. 290,000	481,544	10	4/-	5/-	10	240,772 0 0	.....	...	63,675·861	269,625 1½ 1	4,096·280	381 19 4	270,007 11 5	13,431 12 8	150 0 0	13,581 12 8
	Pref. 120,000	240,000	10	7/6	8/6	10	120,000 0 0	6,000 0 0	5								
undydroog Mines, Limited	283,000	566,000	10	14/9	15/9	10	283,000 0 0	70,750 0 0	25	78,570·038	333,888 14 10	4,640·050	410 6 1	334,299 0 11	16,761 13 8	1,768 15 0	18,530 8 8
alaghat Gold Mines, Limited	.....	.....	...	...	...	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	1,563,000	3,027,544	...	...	..	...	1,513,772 0 0	179,000 0 0	11·82	306,715·304	1,299,580 14 0	16,583·628	1,468 12 9	1,301,049 6 9	64,859 3 0	4,475 0 0	69,334 3 0
																	Increase for 1931 ...
																	Decrease for 1931 ...
B. ODUCING GOLD, BUT NOT PAYING DIVIDENDS.																	
alaghat Gold Mines, Limited	Ord. 106,300	212,530	10	2/3	3/3	10	106,265 0 0	.....	...	22,418·572	94,979 15 9	1,260·360	116 11 10	95,096 7 7	4,726 3 11	.....	4,726 3 11
	Pref. 47,700	95,400	10	6/3	7/3	10	47,700 0 0	.....	...								
Total ...	154,000	307,930	...	...	...	...	153,965 0 0	.....	...	22,418·572	94,979 15 9	1,260·360	116 11 10	95,096 7 7	4,726 3 11	.....	4,726 3 11
																	Increase for 1931 ...
																	Decrease for 1931 ...
C. WORKING, BUT NOT PRODUCING GOLD. Nil.	.....	.....	...	...	...	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	.....	.....	...	...	...	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....
Total of A, B and C ...	1,717,000	3,335,474	...	...	...	...	1,667,737 0 0	179,000 0 0	10·73	329,133·876	1,394,560 9 9	17,843·988	1,585 4 7	1,396,145 14 4	69,585 6 11	4,475 0 0	74,060 6 11
																	Increase for 1931 ...
																	Decrease for 1931 ...

State of Mysore for the years 1930 and 1931.

Table 1.

1931

Nominal Capital £ Stg.	Shares: Number issued	Shares: Par Value-Shillings	Shares: December Prices Min.	Shares: December Prices Max.	Paid-up Capital: Per Share-Shillings	Paid-up Capital: Total £ Stg.	Dividends Paid: Amount £ Stg.	Dividends Paid: Percentage of Paid-up Capital	Fine Gold and Silver Produced: Mint Fine Gold Ounces	Fine Gold and Silver Produced: Value £ Stg. (a)	Fine Gold and Silver Produced: Mint Fine Silver Ounces	Fine Gold and Silver Produced: Value £ Stg.	Fine Gold and Silver Produced: Total value of Fine Gold and Silver £ Stg.	Royalty payable to Government: At 5 per cent on the value of gold and silver produced less refining charges £ Stg.	Royalty payable to Government: At 2½ per cent on the dividends declared £ Stg.	Royalty payable to Government: Total £ Stg.	Total dividends paid up to date £ Stg.
610,000	1,220,000	10	6/6	7/6	10	610,000 0 0	61,000 0 0	10	95,987·618	449,482 18 4	4,342·55	413 2 6	449,896 0 10	22,348 9 6	1,525 0 0	23,873 9 6	(b) 10,381,769 13 11
260,000	520,000	10	9/-	9/6	10	260,000 0 0	39,000 0 0	15	65,702·743	308,171 12 8	5,311·10	465 18 10	308,637 11 6	15,326 5 8	975 0 0	16,301 5 8	4,798,966 8 6
Ord. 290,000	481,544	10	2/9	3/9	10	240,772 0 0	6,019 6 0	2½	62,995·856	300,239 12 0	5,163·21	468 14 0	300,708 6 0	14,907 7 11	525 9 8	15,432 17 7	3,786,234 18 6
Pref. 120,000	240,000	10	5/3	6/3	10	120,000 0 0	15,000 0 0	12½									
283,000	566,000	10	16/3	17/3	10	283,000 0 0	77,825 0 0	27½	79,935·841	377,902 0 11	6,081·56	548 11 0	378,450 11 11	18,961 7 2	1,945 12 6	20,906 19 8	(c&d) 3,073,379 9 4
Ord. 106,300	212,530	10	-/6	1/6	10	106,265 0 0	10,626 10 0	10	25,811·966	122,895 18 0	1,706·43	151 2 1	123,047 0 1	6,075 4 8	504 3 3	6,579 7 11	429,690 17 0
Pref. 47,700	95,400	10	3/-	4/-	10	47,700 0 0	9,540 0 0	20									
1,717,000	3,335,474	...	...	...	...	1,667,737 0 0	219,010 16 0	13·13	330,434·024	1,558,692 1 11	22,604·85	2,047 8 5	1,560,739 10 4	77,618 14 11	5,475 5 5	83,094 0 4	22,470,041 7 3
154,000	307,930	...	...	..	...	153,965 0 0	40,010 16 0	1·31	23,718·720	259,111 7 11	6,021·22	578 15 8	259,690 3 7	12,759 11 11	1,000 5 5	13,759 17 4	.....
.....	.....	...	...	...	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	...	...	...	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....
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.....	.....	...	...	...	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	...	...	...	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....
1,717,000	3,335,474	...	...	...	...	1,667,737 0 0	219,010 16 0	13·13	330,434·024	1,558,692 1 11	22,604·85	2,047 8 5	1,560,739 10 4	77,618 14 11	5,475 5 5	83,094 0 4	(e) 22,520,274 4 8
.....	.....	...	...	...	...	.....	40,010 16 0	1·31	1,300·148	164,131 12 2	4,760·862	462 3 10	164,593 16 0	8,033 8 0	1,000 5 5	9,033 13 5	.....
.....	.....	...	...	...	...	.....	.....	..	.....	.....	.....	.....	.....	..	.....	.....	.....

REMARKS

(a) Values are taken from Companies' reports.

(b) In addition to this, the Company paid as dividends in 1889, a sum of £287,500, being the realization by sale of property to the Champion Reef Company.

(c) In addition to this amount, £8,843-15-0 on the agreed valuation of 2s. 6d. per share on 70,750 shares of the Jibutil Gold Mines of Anantapur, Ltd., were distributed on 13th December 1911.

(d) Includes £140,652-19-10 paid by the then Nundydroog Gold Mining Co., Ltd.

*Paid dividends on preferential shares only, for 1930.

(e) Includes £30,632-11-11, paid by the Coromandel Gold Mining Co., of India, Ltd., and £19,600-5-6 paid by the Mysore West and the Mysore Wynaad Gold Companies, Ltd.

Machinery and Plant in use at Mines in the

SPECIFICATIO

NAME AND SITUATION OF MINE	STEAM POWER																											
	BOILERS						STEAM ENGINES																			LAMPS		
	Number		Aggregate Area and Capacity (of those in use)				Winding and Hauling			Pumping			Air Compression			Locomotives			For other purposes			Total Maximum B. H. P. developed			
	Total	In use	Grate Area. Sq. feet	Heating Surface. Sq. feet	Maximum Evaporative Capacity. Gallons per hour	Actual Evaporation Gallons per hour	Number Total	Number In use	Maximum B. H. P. developed	Number Total	Number In use	Maximum B. H. P. developed	Number Total	Number In use	Maximum B. H. P. developed	Number Total	Number In use	Maximum B. H. P. developed	Number Total	Number In use	Maximum B. H. P. developed		Number	Equivalent connection in Kilowatts	
1. The Mysore Gold Mine, Bowringpet Taluk, Kolar District ...	1	1	10·00	183·00	120·00	50·00	...	...	..	...	...	...	2	..	..	...	...	...	...	..	..	...	3,015	106·76	
2. The Champion Reef Gold Mine do do	14	4	182·00	7,640·00	2,840·00	994·00	3	2	8,000	...	...	...	...	...	...	...	...	...	...	...	...	8,000	1,710	55·02	
3. The Ooregum Gold Mine do do	11	5	186·50	5056·00	2,741·00	2,065·00	4	4	1,831	...	...	...	1	...	...	...	...	...	...	...	...	1,831	1,880	83·40	
4 The Nundydroog Gold Mine do do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,886	60·00	
5. The Balaghat Gold Mine do do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	...	810	31·17	
6. The United Steel Cos., Ltd. (Workington Iron and Steel Branch), Shimoga Taluk, Shimoga District.	13	..	...	..	...	...	...	...	...	..	...	...	...	...	...	10	...	...	3	...	...	...	...	...	
7. The Mysore Chromite, Ltd., Mysore Taluk, Mysore District, Arsikere Taluk, Hassan District.	3	3	19·30	389·00	130·00	115·00	2	2	14	...	...	...	...	...	...	...	...	...	...	...	...	14	100	4·40	
Total ...	42	13	397·80	13,268·00	5,831·00	3,224·00	9	8	9,845	..	..	...	3	...	...	10	...	...	3	...	...	9,845	9,401	336·75	
Total for 1930 ...	45	17	399·80	13,778·00	6,174·50	3,291·50	10	7	9,789	5	4	14	3	...	.	10	...	..	4	1	10	9,799	9,667	349·20	

Boilers classed according to Type

TYPE OF BOILER	NUMBER		AGGREGATE AREA A	
	Total	In use	Grate Area. Sq. feet	Heating Surface. Sq. feet
Cornish	...	...	...	...
Lancashire	15	4	166·00	3,840·00
Vertical	4	4	43·00	511·00
Horizontal	1	1	10·00	163·00
Locomotive	14	1	6·30	198·00
Galloway	...	...	...	...
Babcock	8	3	172·50	8,556·00
Total ...	42	13	397·80	13,268·00
Total for 1930 ...	45	17	399·80	13,778·00

n the State of Mysore during the year 1931.

CATION No. 1.

Table 2.

ELECTRICITY																							
LAMPS		MOTORS																					
		Cauvery Power										Kolar Mines Power											
Equivalent connection in Kilowatts	Annual consumption B. T. U.	Number Total	Number In use	Used for	Nominal H. P.	Rating in H. P.	Average constant H. P. absorbed	Annual consumption B. T. U.	Number Total	Number In use	Used for	Nominal H. P.	Maximum H. P. developed	Annual consumption B. T. U.	REMARKS
106·76	157,012	44	43	7 Air Compressors 4 Mill 7 Ventilating Fans 9 Pumps 4 Slimes Plant 10 Tube Mills 1 Mortar Mill 1 Tramming	4,918·50	4,268	2,985	19,503,700	60	52	3 Compressors 2 Converter Set 2 Fans 2 Electric Locomotives 3 Stone Crushers 12 Hoists 1 Fitting Shop 3 Saw Mills 1 Cyanide Dept. (Driving machines) 5 Pumps 2 Blowers 2 Endless Ropeways 2 Motor Generator Set 1 Magnetic Separator 1 Mill 2 Tube Mills 3 Slimes Plant 2 Furnaces 3 Cranes	8,269·75	3,798·00	3,916,621	
55·02	121,115	32	32	6 Air Compressors 2 Mill 5 Ventilating Fans 8 Pumps 2 Slimes Plant 3 Tube Mills 2 Filter Plant 1 Dump Retreatment 1 Storage Battery 1 Cooling 1 Endless ropeway	4,059·90	3,688	2,718	17,762,000	42	42	4 Compressors 2 Stone Crushers 14 Pumps 1 Ropeway 7 Hoists 1 Fitting Shop 1 O'Donovan Furnace 1 Machine Tool 2 Circular and Band Saws 4 Dump retreatment and sands plant 1 Mortar Mill 1 Electric Crane 1 Booster 2 Blowers	3,447·50	2,998·50	2,419,621	
83·40	183,683	33	30	6 Air Compressors 1 Mill 2 Cyanide and Slimes Plant 13 Pumps 5 Ventilating Fans 2 Tube Mills 1 Belt Conveyer	4,782·50	3,699	2,841	18,570,000	49	49	22 Hoists and Accessories 3 Compressors 1 Picking Floor 1 Fitting Shop 1 Carpenters' Shop 1 Extractor House 1 Assay Office Crusher 1 Concentrating Table 1 Printing Press 1 Mortar Mill 2 Endless Ropeways 4 Pumps 2 Mills 1 Cyanide works 1 Blacksmith Shop Fan 4 Dairy 1 Zinc Lathe 1 Jumper shop	4,332·50	4,883·50	4,029,772	
60·00	134,529	25	25	1 Slimes Plant 6 Air Compressors 2 Mill 8 Pumps 4 Tube Mills 1 Vortex Mixer 3 Ventilating Fans	3,459·50	2,964	2,032	13,672,200	59	56	25 Hoists and Accessories 2 Stone Breakers 3 Band and Circular Saws 8 Pumps 3 Fitting Shop 1 Assay Office 1 Mortar Mill 1 Slimes Plant 1 Ventilating Fan 1 Picking Floor 1 Smith Shop 1 Moulding Shop 1 Crane 2 Endless Ropeways 1 Reconcentration Plant 2 Compressors 1 Battery charging set 1 Arc welder	3,042·25	7,411·25	5,856,934	
31·17	35,732	23	23	4 Air Compressors 10 Pumps 2 Mill 3 Slimes Plant 2 Ventilating Fans 2 Tube Mills	1,622·50	1,484	1,019	6,658,500	20	20	1 Fitting Shop 4 Slimes Plant 2 Saw Mills 1 Stone Breaker 8 Hoists 3 Pumps 1 Compressor	1,655·00	2,072·00	1,145,669	
...	...	...	...		...	...	...	...	...	...	...	...	...	...	
4·40	18,940	4	4	3 Pumps 1 Workshop	88·00	57	73	87,069	...	...	...	...	...	...	
336·75	651,011	161	157	...	18,930·90	16,160	11,728	76,253,469	230	219	...	25,747·00	21,163·25	17,368,617	
349·20	603,725	164	158	...	18,618·40	15,846	12,111	73,030,088	218	207	...	24,880·17	20,414·42	15,885,077	

to Type.

ATE AREA AND CAPACITY (of those in use)		
g Surface. feet	Maximum Evaporative Capacity. Gallons per hour	Actual Evaporation. Gallons per hour
...	...	...
3,840·00	2,276·00	1,324·00
511·00	365·00	292·00
163·00	30·00	28·00
198·00	80·00	70·00
...	...	...
8,556·00	3,080·00	1,610·00
13,268·00	5,831·00	3,324·00
13,778·00	6,174·50	3,291·50

Machinery and Plant in use at Mines in the State of Mysore during th

SPECIFICATION No. 2.

NAME AND SITUATION OF MINE	MINING MACHINERY																																			
	WINDING ENGINES AND HOISTS																					PUMPING ENGINES AND PUMPS (MINE PUMPS ONLY) (a)										AIR COMPRESSORS					
	Surface									Underground						Miscellaneous						Steam				Electric				Compressed Air				Steam			Electric		
	Steam			Electric			Compressed Air			Electric			Compressed Air			Electric			Compressed Air																				
	Number		Maximum B. H. P. developed	Number		Maximum B. H. P. developed	Number		Maximum B. H. P. developed	Number		Maximum B. H. P. developed	Number		Maximum B. H. P. developed	Number		Maximum B. H. P. developed	Number		Maximum B. H. P. developed	Number		Maximum capacity in gallons per hour	Average quantity of water pumped. Gallons per hour	Number		Maximum capacity in gallons per hour	Average quantity of water pumped. Gallons per hour	Number		Maximum capacity in gallons per hour	Average quantity of water pumped. Gallons per hour	Number		Average quantity of free air delivered per minute. Cubic feet	Number		Average quantity of free air delivered per minute Cubic feet
	Total	In use		Total	In use		Total	In use		Total	In use		Total	In use		Total	In use		Total	In use		Total	In use			Total	In use			Total	In use			Total	In use		Total	In use	
1. The Mysore Gold Mine, Bowringpet Taluk, Kolar District	...	...	...	5	5	3,570	7	7	1,020	5	5	557	21	19	296	2	2	8	...	...	...	...	...	...	...	9	9	61,860	22,710	40	18	40,000	7,500	2	...	...	10	9	14,995
2. The Champion Reef Gold Mine do do ...	2	2	8,000	1	1	250	1	1	15	1	1	1,200	24	24	987	2	2	25	1	1	20	...	...	...	...	7	7	34,023	2,309	14	14	11,114	1,376	...	...	...	7	7	12,174
3. The Ooregum Gold Mine do do ...	4	3	1,775	4	4	1,345	1	1	56	4	4	2,525	26	23	375	3	3	95	...	...	...	...	...	...	...	7	7	54,000	12,117	13	6	9,000	900	1	...	...	7	7	9,934
4. The Nundydroog Gold Mine do do ...	1	...	...	3	3	3,100	1	1	400	4	4	1,080	22	22	307	3	3	55	2	2	30	...	...	...	...	9	8	94,980	18,018	13	13	19,500	2,000	...	...	..	8	8	10,593
5. The Balaghat Gold Mine do do ...	...	...	...	2	2	710	...	...	...	6	6	1,165	6	5	98	...	...	...	1	1	8	..	...	...	...	13	13	52,650	10,940	3	3	6,000	117	...	...	...	5	5	4,493
Total ...	7	5	9,775	15	15	8,975	10	10	1,491	20	20	6,527	99	93	2,063	10	10	183	4	4	58	..	...	...	...	45	44	297,513	66,194	83	54	75,504	11,893	3	...	...	37	36	52,189
Total for 1930 ...	8	5	9,775	15	14	10,525	10	10	1,491	20	20	6,337	94	86	2,028	10	10	183	3	2	18	1	...	...	...	43	42	310,125	72,284	89	52	70,214	10,079	3	...	...	36	35	51,539

Table 3.

REDUCING MACHINERY AND TAILINGS PLANT																									
CRUSHING, GRINDING AND AMALGAMATING												TUBE MILLS			CYANIDING											
Rock breakers			Stamps												Sands Plant				Slimes Plant							
Number			Number		Weight in lbs. of each head	Number of drops per minute	Height of drop in inches	Depth of discharge in inches	Screens			Number			Number of Vats		Total Capacity of Vats. Tons	Total Capacity of Plant for 24 hours. Tons	Number of Collectors		Number of Agitators			Vacuum Filters	Total Capacity of Plant for 24 hours. Tons	REMARKS
In use	Type		Total	In use					Kind of screen	Number of holes per sq. inch		Total	In use	Size	Total	In use			Total	In use	Total	In use	Type	Type		
8	Bigelow Jaw crusher		100	100	1,150	97	8·50	3·00	Woven wire	64		6	4	18′×6′	...	...	...	...	5	5	7	7	Air and Mechanical.	Butters & Moore	750 350	(a) Not including pumps for mills, cyanide works, etc.
2	Blake Marsden		120	30	1,250	96	8·00	3·00	Do and Punched Screen	16 9		7	7	19′×4¾′	...	...	...	...	4	4	9	9	Brown Pachuca	Butters and Oliver	700 270	
4	2 Do 2 Gates		80	70	1,300	96	9·00	2·50	Woven wire	9		4	4	(3) 22′×5½′ (1) 18′×6′	...	...	...	...	5	5	4	4	Mechanical	Butters	1,100	
2	Jaw ...		53	53	1,070	99	7·50	2·00	Do ..	256 & No. 9		4	3	(2) 16′×6′ (1) 8′×6′	8	6	1,760	165	6	6	6	6	Brown Pachuca	Do	459	
1	Blake Marsden		30	20	1,050	98	8·00	2·50	Do ...	36, 64 & 256		2	2	16′×5½′ 22′×4¾′	...	...	...	...	4	3	2	2	Mechanical	Moore ...	250	
12	...		383	273	1,164	97	8·20	2·60	...	...		23	20	...	8	6	1,760	165	24	23	28	28	...	...	3,879	
13	...		402	275	1,130	99	8·10	2·60	...	...		23	19	...	14	13	2,960	534	24	23	28	24	...	..	3,947	

Statement of work done and number of persons employed at Mines working in the State of Mysore d

NAME AND SITUATION OF MINE	MINING				TONS OF MATERIAL TREATED							BELOW GROUND			
					ORE					TAILINGS					
								Milling and amalgamating							
	Feet driven (including shafts sunk)	Shafts sunk (feet)	Stoping (cubic fathoms)	Total material excavated (tons)	Raised to surface	Percentage sorted out as waste	Ore obtained	Crushed by stamps and tube mills	Crushed per stamp per 24 hours	Sands and slimes treated by cyanide	Aggregate amount treated in mills and by tailings process	Europeans	Anglo-Indians	Indians	Total
GOLD.															
1. The Mysore Gold Mine Bowringpet Taluk, Kolar District...	11,892·00	725·00	6,225·76	203,930·17	182,102·00	0·31	180,254·00	(a)182,731·00	8·33	182,731·00	365,462·00	40	39	3,409	3,488
2. The Champion Reef Gold Mine ... do do ...	8,947·00	110·00	2,675·39	112,664·69	99,420·00	10·01	89,465·00	(b) 98,930·00	10·78	327,156·00	426,086·00	33	16	1,522	1,571
3. The Ooregum Gold Mine ... do do ...	5,362·00	365·00	4,365·85	116,804·26	(c)152,854·00	11·72	134,943·00	(d)135,441·00	13·60	396,346·00	531,787·00	40	17	1,971	2,028
4. The Nundydroog Gold Mine ... do do ...	9,077·50	223·00	4,294·30	130,300·79	127,212·00	8·72	116,114·00	(e)123,039·00	10·58	228,524·00	351,563·00	31	30	1,884	1,945
5. The Balaghat Gold Mine ... do do ...	4,750·50	573·00	1,460·88	55,067·20	44,085·00	6·23	41,310·00	(f) 41,850·00	6·49	41,850·00	83,700·00	8	13	901	922
Total for Gold Mines ...	40,029·00	1,996·00	19,022·18	618,767·11	605,673·00	6·99	562,086·00	581,991·00	10·05	1,176,607·00	1,758,598·00	152	115	9,687	9,954
OTHER MINERALS.															
MANGANESE.															
6. The United Steel Cos., Ld., Kumsi Block, Shimoga District, M. L. No. 142*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7. Mr. H. D. Coggan, Keshapur Block Holalkere Taluk, Chitaldrug District P. L. No. 727	...	...	...	...	...	...	471·80	...	...	...	...	...	...	2	2
8. The Mysore Iron Mines (Government areas) Bhadigund Block Channagiri Taluk, Shimoga District	...	...	...	...	...	...	612·64	...	...	...	...	...	...	...	...
9. Messrs. Oakley, Duncan & Co., Ld., Mahadevpur Block, Holalkere Taluk, Chitaldrug District. M. L. No. 173	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
CHROME.															
10. The Mysore Chromite, Ld., Shinduvalli Mine, Mysore Taluk, Mysore, District. M. L. No. 147	522·00	153·00	93·00	3,888·00	2,018·76	...	(g) 2,452·02	...	...	..	...	...	...	52	52
Pensamudra Block, Hassan Taluk, Hassan District. M. L. No. 174 ...	...	...	...	...	...	...	1,905·12	...	...	...	...	...	...	2	2
11. The Government Chrome Committee (Government areas). Byrapur Mine, Channarayapatna Taluk, Hassan District	...	...	...	...	...	...	609·28	...	...	...	...	...	...	...	...
Tallur Mine, Mysore Taluk, Mysore District	40·00	15·00	0·58	140·53	1,075·20	...	1,005·20	...	...	...	...	...	...	4	4
12. Messrs. Oakley, Duncan & Co. Ld., Sunkadahalli, Arsikere Taluk, Hassan District. M. L. No. 172	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13. Messrs. V. Manickavelu Mudaliar & Son, Bhaktarhalli Block, Channarayapatna Taluk, Hassan District. M. L. No. 158	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chikkonhalli Block, Channarayapatna Taluk, Hassan District. M. L. No. 159	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jambur Block, Channarayapatna Taluk, Hassan District. M. L. No. 160	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
MAGNESITE.															
14. Messrs. The Tata Iron & Steel Co. Ld., Dodkanya Block, Nanjangud Taluk, Mysore District. M. L. No. 150	...	...	...	...	...	...	397·60	...	...	...	...	...	...	...	...
IRON ORE.															
15. The Mysore Iron Mines (Government areas), Kemmangundi, Tarikere Taluk, Kadur District	...	...	...	...	...	...	17,615·84	...	...	...	...	...	...	...	...
Thanigebyle Quarries, Tarikere Taluk, Kadur District	...	...	...	...	...	...	3,064·32	...	...	...	...	...	...	...	...
LIMESTONE.															
16. The Mysore Iron Mines (Government areas), Kondli Limestone Quarries, Chiknayakanhalli Taluk, Tumkur District	...	...	...	...	...	...	1,197·28	...	...	...	...	...	...	...	...
Gangur Limestone Quarries, Shimoga and Channagiri Taluks, Shimoga District	...	...	...	...	...	...	986·72	...	...	...	...	...	...	...	...
KAOLIN.															
17. The Kolar Brickmaking Co., Ltd., Karadibande Block, Malur Taluk, Kolar District. M. L. No. 154	...	...	...	...	...	...	2,281·15	...	...	...	...	...	...	...	...
Thinnalu Block, Hoskote Taluk, Bangalore District. M. L. No. 164...	...	...	...	...	...	...	630·25	...	...	...	...	...	...	...	...
18. Mr. C. Abdul Rahim's Block Kurubarahalli Bowringpet Taluk, P. L. No. 726/722	...	...	...	...	...	...	11·20	...	...	...	...	...	...	...	...
19. Mr. B. S. Shabuddin's Block, Doddurkarapanahalli, Bowringpet Taluk, Kolar District	...	...	...	...	...	...	4·48	...	...	...	...	...	...	...	...
SOAPSTONE.															
20. Mr. J. Padmarajappa's Block, Tiptur Taluk, Tumkur District. C. L. No. 109	...	...	...	...	...	...	11·20	...	...	...	...	...	...	...	...
21. Mr. T. L. Narasinga Bhan's Block, Tiptur Taluk, Tumkur District. C. L. No. 114/110	...	...	...	...	...	...	70·56	...	...	...	...	...	...	...	...
22. Mr. G. Chennaveerappa's Block, Tiptur Taluk, Tumkur District. C. L. No. 111	...	...	...	...	...	...	26·88	...	...	...	...	...	...	...	...
Total for other Mines ...	562·00	168·00	93·58	4,028·53	3,093·96	...	33,413·54	...	...	...	..	..	...	60	60
Grand Total ...	40,591·00	2,164.00	19,115·76	622,795·64	608,756·96	6·99	595,499·54	581,991·00	10·05	1,776,607·00	1,758,598·00	152	115	9,747	10,014

Tons excavated per man per annum	PERSONS EMPLOYED — On Surface: Europeans	Anglo-Indians	Indians: Males	Females	Children under 12 years	Total	Tons handled per person per annum	Total number of persons employed below ground and on surface	REMARKS
58·47	50	81	1,740	242	128	2,241	163·08	5,729	(a) Includes 2,477 tons from waste rock dumps and stock.
71·72	40	56	1,398	352	147	1,993	213·79	3,564	(b) Includes 9,465 tons from waste rock dumps and stock.
57·60	44	56	1,331	232	90	1,755	303·01	3,783	(c) Excess due to accumulation of rock underground by falls of ground, shaling off, bursting, etc.
66·99	36	70	1,419	206	34	1,765	199·19	3,710	
59·73	19	20	537	57	47	680	123·09	1,602	(d) Includes 208 tons from waste rock dumps and stock and 346 tons crushed by Nundydroog; 56 tons put to reserve.
62·16	189	285	6,425	1,089	446	8,434	208·51	18,388	
...	1	1	12	...	...	14	...	14	(e) Includes 6,116 tons from waste rock dumps and stock and 809 tons crushed by Ooregum.
...	...	...	21	14	...	35	...	37	(f) Includes 540 tons pebbles. *Only a portion of the stock of ore sold.
...	...	...	30	10	...	40	...	40	
...	...	...	1	...	...	1	...	1	Only a portion of the stock of ore sold.
...	1	4	21	10	60	96	...	148	(g) Includes 488·60 tons collected on surface.
..	...	2	25	12	10	49	...	51	Underground work also is being done on a small scale.
...	...	...	11	14	8	33	...	33	
...	...	...	15	8	10	33	...	37	
...	...	...	1	...	...	1	...	1	
...	...	...	3	2	5	10	...	10	
...	...	...	1	2	4	7	...	7	
...	...	...	2	2	3	7	...	7	
	...	...	10	11	4	25	...	25	
...	...	...	100	5	...	105	...	105	
...	...	...	35	5	...	40	...	40	
...	...	...	60	20	...	80	...	80	
...	...	...	40	10	...	50	...	50	
...	...	...	4	4	...	8	...	8	
...	...	...	2	2	...	4	...	4	
...	...	...	2	...	...	2	...	2	
...	...	...	1	...	...	1	...	1	
...	...	...	2	...	...	2	...	2	
...	...	...	14	...	...	14	...	14	
...	...	...	4	...	...	4	...	4	
...	2	7	417	131	104	661	...	721	
62·16	191	292	6,842	1,220	550	9,095	...	19,109	
63·39	192	286	7,009	1,486	555	9,528	220·84	18,925	

Statement of quantity and cost of materials consum

NAME AND SITUATION OF MINE	Fuel: Indian Coal: Tons used	Fuel: Indian Coal: Cost	Fuel: Firewood: Tons used	Fuel: Firewood: Cost	Total Cost	Cost per Ton milled	Electric Power: Cauvery Scheme: Total Cost	Electric Power: Cauvery Scheme: Cost per Ton milled	Electric Power: Kolar Mines: Total Cost	Electric Power: Kolar Mines: Cost per Ton milled	Timber: Quantity	Timber: Cost	Timber: Cost per Ton milled	Granite: Quantity	Granite: Cost	Granite: Cost per Ton milled	Cement: Quantity	Cement: Cost	Cement: Cost per ton milled	Blasting Gelatine: Quantity	Blasting Gelatine: Cost	Dynamite and other Explosives: Quantity	Dynamite and other Explosives: Cost	D[illegible] Number of boxes (100 per box)
		£ Stg.		£ Stg.	£ Stg.	Shillings	£ Stg.	Shillings	£ Stg.	Shillings	C. ft.	£ Stg.	Shillings	Tons.	£ Stg.	Shillings	Tons	£ Stg.	Shillings	lbs.	£ Stg.	lbs.	£ Stg.	(a)
1. The Mysore Gold Mine, Bowringpet Taluk, Kolar District	1,481·12	2,035·12	...	...	2,035·12	0·22	32,858·07	3·60	10,617·17	1·16	198,592	17,342·44	1·90	8,512·00	875·58	0·10	2,872·66	11,894·04	1·30	104,310	8,047·58	48,257	3,351·92	4,393
2. The Champion Reef Gold Mine do do	6,409·37	8,530·33	324·28	260·58	8,790·91	1·78	29,615·68	5·99	6,124·54	1·24	37,153	6,397·67	1·29	2,809·69	238·81	0·05	1,739·05	6,987·28	1·40	51,841	4,212·04	39,319	2,672·43	1,467
3. The Ooregum Gold Mine do do	3,450·45	4,709·14	347·41	261·71	4,970·85	0·73	31,405·51	4·64	10,448·78	1·54	144,181	7,972·79	1·18	5,454·41	927·05	0·14	752·23	3,127·91	0·46	42,090	3,455·00	25,668	1,797·17	2,263
4. The Nundydroog Gold Mine do do	1,376·55	1,942·31	325·02	313·80	2,256·11	0·37	22,831·94	3·71	14,936·25	2·43	137,656	11,351·50	1·85	3,954·94	678·58	0·11	535·77	1,972·57	0·32	73,366	5,712·23	20,599	1,464·71	2,742
5. The Balaghat Gold Mine do do	599·89	915·62	135·46	79·95	995·57	0·48	10,887·90	5·20	3,078·42	1·47	38,145	3,247·54	1·55	5,686·66	627·02	0·30	282·95	1,189·42	0·57	40,420	3,152·38	18,415	1,301·68	1,218
6. The United Steel Cos., Ltd. (Workington Iron and Steel Branch), Shimoga Taluk, Shimoga District.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
7. The Mysore Chromite, Ltd., Mysore Taluk, Mysore District and Arsikere Taluk, Hassan District.	...	...	213·27	135·50	135·50	...	398·89	...	...	...	175	32·87	...	...	...	...	...	...	...	2,210	286·03	...	...	122
8. The Byrapur and Tallur Mines (Government areas) Channarayapatna Taluk, Hassan District and Mysore Taluk, Mysore District.	...	...	...	...	...	...	...	...	...	...	75	11·10	...	...	...	...	...	...	...	...	...	79	9·07	8
9. Messrs. V. Manickavelu Mudaliar and Son's Block, Channarayapatna Taluk, Hassan District, Davangere and Jagalur Taluks, Chitaldrug District	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Messrs. The Tata Iron & Steel Co., Ltd., Mysore and Nanjangud Taluks, Mysore District.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	432	13·50	...
11. The Mysore Iron Mines (Government areas), Birur and Tarikere Taluks, Kadur District, Channagiri and Shimoga Taluks, Shimoga District and Chiknayakanhalli Taluk, Tumkur District.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	375	56·25	40
Total ...	13,317·38	18,132·52	1,345·44	1,051·54	19,184·06	0·65	127,997·99	4·38	45,205·16	1·55	555,977	46,355·91	1·59	26,417·70	3,347·04	0·12	6,182·66	25,171·17	0·87	314,267	24,865·26	153,144	10,666·73	12,256
Total for 1930 .	13,674·79	18,945·00	2,580·06	1,556·05	20,501·05	0·67	120,969·89	4·07	45,029·25	1·52	460,492	38,320·99	1·28	10,540·69	1,583·55	0·05	4,307·50	18,381·78	0·62	280,049	21,923·45	153,248	10,613·95	11,694

Average Wages per Month.

Class	Europeans	Indians
	£ Stg.	Rs.
Chief Underground Agents ...	90·42	...
Assistant Underground Agents...	42·12	...
Foremen ...	29·96	82·06
Timbermen ...	22·88	...
Pitmen ...	44·17	...
Machine mestris ...	...	36·34
Machine coolies ...	...	26·93
Handjumper mestris ...	...	33·68
Handjumper coolies ...	...	25·43
Blasters ...	...	37·16
Timber mestris ...	...	32·03

Mines working in the State of Mysore for the year 1931.

			Light						Mercury			Cyanide				Zinc			Steel								Pig Iron, Wrought and Iron Cast	
			Candles		Calcium Carbide														For drills and jumpers		Bars, plates and rolled sections, etc.		Castings made locally and imported					
Total Cost	Cost per Ton excavated	Cost per Ton milled	Quantity	Cost	Quantity	Cost	Total Cost	Cost per Ton milled	Quantity	Cost	Cost per Ton milled	Quantity	Cost	Cost per Ton treated	Cost per Ton milled	Quantity	Cost	Cost per Ton milled	Quantity	Cost	Quantity	Cost	Quantity	Cost	Total Cost	Cost per Ton milled	Quantity	Cost
£ Stg.	Shillings	Shillings	lbs.	£ Stg.	lbs.	£ Stg.	£ Stg.	Shillings	lbs.	£ Stg.	Shillings	lbs.	£ Stg.	Shillings	Shillings	lbs.	£ Stg.	Shillings	Tons	£ Stg.	Tons	£ Stg.	Tons	£ Stg.	£ Stg.	Shillings	Tons	£ Stg.
4,173·08	1·39	1·55	89,903	2,655·78	121,416	1,430·03	4,085·81	0·45	163	57·05	0·006	88,368	3,640·96	0·40	0·40	18,178	260·02	0·028	41·82	1,486·38	106·80	1,506·69	87·12	769·55	3,762·62	0·36	92·59	1,058·05
7,953·27	1·41	1·61	11,385	333·53	106,516	1,303·12	1,636·65	0·33	69	24·15	0·005	193,074	6,446·99	0·52	1·71	28,838	349·21	0·071	14·68	550·55	91·68	1,074·41	16·72	145·54	1,770·50	0·36	169·74	1,475·28
6,680·26	1·14	0·99	63,160	1,877·38	33,904	399·18	2,276·56	0·34	625	163·12	0·024	212,800	8,806·01	0·44	1·30	21,452	312·74	0·046	16·46	660·26	109·56	1,250·50	99·65	912·93	2,823·69	0·42	96·54	1,284·02
3,996·39	1·38	1·46	68,647	2,051·88	76,412	894·80	2,946·68	0·48	225	73·88	0·012	147,280	6,067·36	0·53	0·99	23,139	348·83	0·057	25·86	963·25	164·30	1,560·12	34·12	304·15	2,827·52	0·46	275·30	2,589·08
5,346·23	1·94	2·55	38,508	1,138·85	31,105	366·38	1,505·23	0·72	421	143·91	0·069	22,393	939·49	0·45	0·45	1,465	21·59	0·010	11·12	442·65	69·33	761·79	34·10	153·42	1,357·86	0·65	49·93	535·43
...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
452·68	...	...	1,824	60·54	...	...	60·54	...	...	...	...	...	...	...	...	...	...	...	0·55	26·86	0·46	10·99	...	...	37·85	...	...	...
15·72	..	...	137	4·04	...	...	4·04	...	...	...	...	...	...	...	...	...	...	...	0·08	2·50	0·04	0·86	...	...	3·36	...	...	...
...	...	...	...	..	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20·03	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	82·00	1·13	...	...	1·13	...	...	...
89·08	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·19	14·36	...	...	...	...	14·36	...	...	...
										...	...																	
726·74	1·39	1·48	273,564	8,122·00	369,353	4,393·51	12,515·51	0·43	1,503	462·11	0·016	663,915	27,900·81	0·47	0·96	93,072	1,292·39	0·044	110·76	4,146·81	624·17	6,166·49	271·71	2,285·59	12,598·89	0·43	684·10	6,941·86
516·43	1·35	1·32	246,748	7,571·23	289,026	3,448·54	11,019·77	0·37	2,235	668·12	0·023	653,104	27,082·61	0·45	0·91	100,347	1,637·12	0·055	112·04	4,752·73	526·15	6,742·52	257·04	2,705·39	14,200·64	0·48	670·10	8,397·24

...	87·05			
Surface coolies	82·00	15·00		
Firemen	...	17·45		
Chief Cyanide Chemists and Reduction Officers.	97·92	...		
Assistant Cyanide Chemists and Reduction Officers.	47·34	...		
Millmen	19·20	...		
Fitters	...	(4) 42·65 (5) 35·69		
Average for above classes ...	£ 47·28	Rs. 32·64		
Average for above classes in 1930 ...	£ 44·88	Rs. 32·27		

(1) Special pay for consulting Engineer for 5 Mines. Wages assumed at £85 for statistical purposes.
(2) First class.
(3) Second class
(4) Surface.
(5) Underground.

Table 5.

IT IRON INGS	SHOES AND DIES			WAGES			
Cost per Ton milled	Quantity	Cost	Cost per Ton milled	Total Amount	Per Ton milled	Total of these costs per Ton milled	REMARKS
Shillings	Tons	£ Stg.	Shillings	£ Stg.	Shillings	Shillings	
0·116	51·38	796·26	0·09	174,049·87	19·05	30·33	(a) Includes 152·25 electric detonators.
0·298	17·17	276·30	0·06	110,319·72	22·30	38·49	
0·190	20·76	364·59	0·05	112,253·53	16·58	28·63	
0·421	18·12	351·92	0·06	107,246·11	17·43	30·16	
0·256	10·84	223·66	0·11	49,332·72	23·58	37·97	
...	...	...	...	1,242·98	...	...	Manganese.
...	...	...	...	4,935·00	...	...	Chromium.
...	...	...	...	588·39	...	...	Do.
...	...	...	...	655·84	...	...	Do.
...	...	..	...	241·08	...	...	Magnesite.
...	...	...	...	4,819·88	...	...	Iron ore and Limestone.
0·239	118·27	2,042·73	0·07	565,685·12	19·01	31·84	
0·283	157·63	2,552·74	0·09	543,813·36	17·60	29·34	

Table of gold production and working costs at the Gold Mines w

NAME AND SITUATION OF MINE	GOLD PRODUCTION																	
	From Mills and Tube Mills (current ore)					By Cyanide Process (current ore)					Total Production (current ore)				Retreatment of T		
	Assay value of ore treated Shillings per ton	Fine Gold	Value		Percentage recovered	Assay value of tailings Shillings per ton	Fine Gold	Value		Percentage recovered	Fine Gold	Value		Percentage recovered	Assay value of tailings Shillings per ton	Fine Gold	
		Ounces	£ Stg.	Shillings per ton			Ounces	£ Stg.	Shillings per ton		Ounces	£ Stg.	Shillings per ton milled			Ounces	£ S
1. The Mysore Gold Mine, Bowringpet Taluk, Kolar District ...	44·35	69,127·37	293,791·32	32·16	72·50	11·90	24,743·06	105,158·01	11·51	96·72	93,870·43	398,949·33	43·67	98·46	...	...	
2. The Champion Reef Gold Mine do do ...	50·28	45,445·18	193,142·02	39·05	77·66	10·57	11,312·82	48,079·49	9·72	91·96	56,758·00	241,221·51	48·77	96·99	4·08	8,260·27	35,10
3. The Ooregum Gold Mine do do ...	31·93	41,400·20	175,950·85	25·98	81·37	5·89	7,835·44	33,300·62	4·92	83·49	49,235·64	209,251·47	30·90	96·77	5·03	12,506·75	53,15
4. The Nundydroog Gold Mine do do ...	48·70	60,957·93	259,071·20	42·11	86·47	6·31	7,236·86	30,756·66	4·99	79·16	68,194·79	289,827·86	47·11	96·74	7·34	7,109·82	30,21
5. The Balaghat Gold Mine do do ...	53·22	23,344·54	99,214·30	47·41	89·09	4·75	1,974·95	8,393·54	4·01	84·45	25,319·49	107,607·84	51·43	96·63	...	...	
Total ...	44·03	240,275·22	1,021,169·69	35·09	79·70	8·58	53,103·13	225,688·32	7·76	90·39	293,378·35	1,246,858·01	42·85	97·32	5·08	27,876·84	118,4
Total for 1930 ...	43·29	230,599·13	980,046·30	33·10	76·46	10·01	64,019·33	272,082·15	9·19	91·60	294,618·46	1,252,128·45	42·29	97·69	5·19	30,346·79	128,9

Value taken at 85 shillings per oz.

orking in the State of Mysore during the year 1931.

Table 6.

ILINGS DUMPS			FROM OTHER SOURCES		TOTAL PRODUCTION FROM ALL SOURCES		WORKING COSTS							Total Expenditure (including administration)		REMARKS
							MINING			ORE TREATMENT (CURRENT ORE)		RETREATMENT OF TAILINGS, DUMPS				
Value			Fine Gold	Value	Fine Gold	Value				Milling, Tube-milling and Cyaniding		Tube-milling and Cyaniding				
	Shillings per ton	Percentage recovered	Ounces	£ Stg.	Ounces	£ Stg.	£ Stg.	Shillings per ton excavated	Shillings per ton milled	£ Stg.	Shillings per ton treated	£ Stg.	Shillings per ton treated	Shillings per ton of current ore treated	Shillings per ton milled including cost of retreatment of old dumps	
	...	...	(a) 2,171·21	9,227·64	96,041·64	408,176·97	201,512·14	19·76	22·06	44,159·53	4·83	...	...	33·95	33·95	
·15	3·03	75·40	(b) 702·04	2,983·67	65,720·31	279,311·33	134,629·36	23·90	27·22	20,806·79	4·21	32,829·18	2·88	39·67	46·31	Fine gold figures for twelve months supplied by the Mining Companies are subject to final adjustment.
·69	4·07	81·00	(c) 1,341·44	5,701·12	63,083·83	268,106·28	158,369·17	27·12	23·31	24,146·86	3·57	28,015·00	2·15	33·38	37·52	(a) Obtained from clean up of plant.
·74	5·73	78·05	(d) 4,531·04	19,256·92	79,835·65	339,301·52	157,212·72	24·13	25·55	29,393·03	4·78	17,917·82	3·40	36·73	39·64	(b) Recovered from copper bars.
	...	...	(e) 519·62	2,208·38	25,839·11	109,816·22	69,912·70	25·39	33·41	12,887·00	6·16	..	...	49·40	49·40	(c) Obtained from dismantled Tube Mill, amalgamating plates, copper bars and quartz mined by Nundydroog Mine.
6·58	3·98	76·44	9,265·35	39,377·73	330,520·54	1,404,712·32	721,636·09	23·32	24·80	131,393·21	4·52	78,762·00	2·65	36·49	39·20	(d) Obtained from dismantled part of old Mill and quartz mined by Ooregum Mine. (e) Obtained from base bar.
3·86	4·18	80·51	4,341·97	18,453·37	329,307·22	1,399,555·68	643,887·42	22·19	21·75	130,376·81	4·40	77,110·69	2·50	33·21	35·82	

Number and Classification of fatal and serious accidents at Mines working in the State of Mysore during the year 1931.

Table 7.

NAME AND SITUATION OF MINE	Falls in Mines				In and at Shafts								Miscellaneous Below Ground										On Surface					Total due to			
	Falls of hanging wall	Falls of sides or roof	Falls of ore from working places	Total falls	Over-winding	Ropes and chains breaking	Whilst ascending or descending by machinery	Falling into shaft from surface	Falling from part way down	Things falling from surface	Things falling from part way down	Total in and at shafts	Rockbursts	Suffocation by gases	Explosion due to misfires	By Explosives (other than misfires)	Falls of persons or things in Rises, Winzes and Stopes	On Inclined and Engine Planes	By Trams or Tubs, but not on Inclined and Engine Planes	By machinery	By other causes	Total miscellaneous below ground	By machinery	Boilers and steam pipes bursting, etc.	On Railways, Tramways or Aerial Ropeways belonging to Mine	Miscellaneous	Total on surface	Negligence	Recklessness	Unavoidable	Grand Total
Number of Class of Accident ...	i	ii	iii		iv	v	vi	vii	viii	ix	x		xi	xii	xiii	xiv	xv	xvi	xvii	xviii	xix		xx	xxi	xxii	xxiii					
Mysore Gold Mine, Bowringpet Taluk, Kolar District	...	...	...	0	...	...	2	...	2	...	...	4	12	...	2	...	7	...	2	1	19	43	3	...	3	2	8	6	6	43	55
Champion Reef Gold Mine do do	1	...	1	2	...	...	...	...	1	...	1	2	7	...	...	2	10	...	4	...	14	37	...	...	..	1	1	3	1	38	42
Ooregum Gold Mine do do	1	...	...	1	...	...	2	...	...	...	...	2	14	...	4	...	6	...	2	...	13	39	...	...	1	1	2	6	1	37	44
Nundydroog Gold Mine do do	1	...	...	1	...	...	1	..	...	...	...	1	10	1	...	...	6	...	2	2	9	30	...	...	1	4	5	4	2	31	37
Balaghat Gold Mine do do	...	...	...	0	...	...	1	...	1	...	1	3	7	...	1	...	2	...	2	...	2	14	...	...	...	...	0	3	0	14	17
Total ..	3	0	1	4	0	0	6	0	4	0	2	12	50	1	7	2	31	0	12	3	57	163	3	0	5	8	16	22	10	163	195
Number due to: Negligence ...	1	0	0	1	0	0	4	0	1	0	1	6	0	0	6	1	3	0	3	0	1	14	0	0	0	1	1				
Number due to: Recklessness ...	0	0	0	0	0	0	1	0	1	0	0	2	0	0	1	0	1	0	0	2	2	6	0	0	2	0	2				
Number due to: Unavoidable ...	2	0	1	3	0	0	1	0	2	0	1	4	50	1	0	1	27	0	9	1	54	143	3	0	3	7	13				

Number of fatal and serious accidents per 1,000 persons employed at Mines working in the State of Mysore during the year 1931.

Table 8.

NAME AND SITUATION OF MINE	NUMBER PER 1,000 DUE TO			Total per 1,000	Total per 1,000 for the year 1930	Total per 1,000 for the year 1929	REMARKS
	Negligence	Recklessness	Unavoidable				
1. The Mysore Gold Mine, Bowringpet Taluk, Kolar District	1·05	1·05	7·51	9·60	10·03	9·89	In these columns, in order to avoid large and misleading figures in the case of mines employing less than 1,000 persons, the actual figures obtained for these mines have been modified in the following way:— If the actual figure is less than the average (for all mines), it is inserted here. If the actual figure is greater than the average, the excess above the average is reduced in proportion of the number of persons employed to 1,000. The figure inserted here is equal to the average plus this reduced excess.
2. The Champion Reef Gold Mine do do	0·84	0·28	10·66	11·78	10·96	15·78	
3. The Ooregum Gold Mine do do	1·59	0·26	9·78	11·63	11·49	14·02	
4. The Nundydroog Gold Mine do do	1·08	0·54	8·35	9·97	10·16	11·36	
5. The Balaghat Gold Mine do do	1·87	0·00	8·74	10·61	10·82	9·89	
6. The Mysore Chromite, Ltd., Mysore Taluk, Mysore District	...	...	...	...	...	3·53	
7. The Mysore Iron Works, Kemmangundi Iron Mines, Tarikere Taluk, Kadur District.	...	...	...	...	...	1·42	
8. Tallur Chrome Mines, Mysore Taluk, Mysore District (Government area) ...	...	...	...	...	...	5·15	
Average for all mines ...	1·19	0·54	8·86	10·60	10·63	11·21	
Average for 1930 ...	0·81	0·69	9·13				

Number of persons killed in accidents at Mines working in the State of Mysore for the year 1931.

Table 9.

NAME AND SITUATION OF MINE	Falls in Mines					In and at Shafts							Miscellaneous Below Ground										On Surface					
	Falls of hanging wall	Falls of sides or roof	Falls of ore from working places	Total falls	Over-winding	Ropes and chains breaking	Whilst ascending or descending by machinery	Falling into shaft from surface	Falling from part way down	Things falling from surface	Things falling from part way down	Total in and at shafts	Rockbursts	Suffocation by gases	Explosion due to misfires	By explosives (other than misfires)	Falls of persons or things in Rises, Winzes and Stopes	On Inclined and Engine Planes	By Trams or Tubs, but not on Inclined and Engine Planes	By machinery	By other causes	Total miscellaneous below ground	By Machinery	Boiler and Steam Pipes bursting, etc.	On Railways, Tramways or Aerial Ropeways belonging to Mine	Miscellaneous	Total on surface	Grand Total
Number of Class of Accident ...	i	ii	iii		iv	v	vi	vii	viii	ix	x		xi	xii	xiii	xiv	xv	xvi	xvii	xviii	xix		xx	xxi	xxii	xxiii		
1 The Mysore Gold Mine, Bowringpet Taluk, Kolar District	...	...	...	0	...	...	...	...	2	...	...	2	28	...	...	...	3	...	...	...	...	31	1	...	2	...	3	36
2. The Champion Reef Gold Mine do do	...	...	...	0	...	...	...	...	...	...	...	0	2	...	...	...	5	...	...	...	...	7	...	...	...	...	0	7
3. The Ooregum Gold Mine do do	...	...	...	0	...	...	1	...	...	...	...	1	26	...	...	...	3	...	...	...	...	29	...	...	...	...	0	30
4. The Nundydroog Gold Mine do do	...	...	...	0	...	...	...	...	...	...	...	0	3	53	...	...	...	...	...	...	...	56	...	...	...	...	0	56
5. The Balaghat Gold Mine do do	...	...	...	0	...	...	...	...	1	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	...	...	0	2
Total ...	0	0	0	0	0	0	1	0	3	0	0	4	59	53	1	0	11	0	0	0	0	124	1	0	2	0	3	131

Number of persons seriously injured in accidents at Mines working in the State of Mysore during the year 1931.

Table 10.

NAME AND SITUATION OF MINE	Falls in Mines					In and at Shafts							Miscellaneous below Ground										On Surface					
	Falls of hanging wall	Falls of sides or roof	Falls of ore from working places	Total falls	Over-winding	Ropes and chains breaking	Whilst ascending or descending by machinery	Falling into shaft from surface	Falling from part way down	Things falling from surface	Things falling from part way down	Total in and at shafts	Rockbursts	Suffocation by gases	Explosion due to misfires	By Explosives (other than misfires),	Falls of persons or things in Rises, Winzes and Stopes	On Inclined and Engine Planes	By Trams or Tubs, but not on Inclined and Engine Planes	By machinery	By other causes	Total miscellaneous below ground	By machinery	Boilers and Steam Pipes bursting, etc.	On Railways, Tramways or Aerial Ropeways belonging to Mine	Miscellaneous	Total on surface	Grand Total
Number of Class of Accident ...	i	ii	iii		iv	v	vi	vii	viii	ix	x		xi	xii	xiii	xiv	xv	xvi	xvii	xviii	xix		xx	xxi	xxii	xxiii		
1. The Mysore Gold Mine, Bowringpet Taluk, Kolar District	...	...	...	0	...	...	2	...	1	...	...	3	15	...	2	...	4	...	2	1	19	43	2	...	1	2	5	51
2. The Champion Reef Gold Mine do do	1	...	1	2	..	...	...	..	1	...	1	2	10	...	...	3	5	...	4	...	14	36	...	...	...	1	1	41
3. The Ooregum Gold Mine do do	1	...	...	1	...	...	1	..	...	...	...	1	17	...	6	...	3	...	2	...	12	40	...	..	1	1	2	44
4. The Nundydroog Gold Mine do do	1	...	...	1	...	...	4	...	...	...	...	4	8	6	...	...	6	...	2	2	9	33	...	...	1	4	5	43
5. The Balaghat Gold Mine do do	...	..	...	0	...	...	1	...	...	...	1	2	8	...	1	...	2	...	2	...	2	15	...	...	...	...	0	17
Total ...	3	0	1	4	0	0	8	0	2	0	2	12	58	6	9	3	20	0	12	3	56	167	2	0	3	8	13	196

Comparative table showing the mortality and other items at Gold Mines working in the State of Mysore and in the Transvaal.

ITEMS	MYSORE																				
Year ...	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
1. Number of separate accidents (fatal and serious) per 1,000 persons employed	14·21	10·71	10·83	8·60	10·22	7·48	6·69	6·12	8·19	11·03	7·41	7·51	9·90	10·28	10·65	10·19	10·99	9·88	12·25	10·63	10·60
2. Death rate per 1,000 persons employed above ground	0·59	0·49	0·28	0·28	0·09	0·48	0·29	0·47	0·56	0·20	0·29	0·37	0·20	0·00	0·11	0·42	0·22	0·11	0·46	0·12	0·36
3. Death rate per 1,000 persons employed below ground	5·09	5·12	7·28	3·68	4·23	5·66	4·67	4·73	4·54	6·01	4·95	5·42	7·09	6·43	6·92	4·50	4·94	4·36	6·66	4·26	12·86
4. Death rate per 1,000 persons employed (above and below ground) ...	3·35	3·36	4·38	2·28	2·59	3·52	2·81	2·90	2·79	3·55	2·91	3·09	3·79	3·38	3·62	2·45	2·64	2·28	3·74	2·31	7·12
5. Number of persons employed for each 100,000 tons of ore crushed ...	3,303	3,278	3,160	3,258	3,384	3,288	3,333	3,434	3,475	3,554	3,639	3,462	3,169	2,890	2,792	2,924	2,963	2,884	2,797	2,924	3,159
6. Number of persons killed for each 100,000 tons of ore crushed ...	11·07	11·01	13·84	7·44	8·77	11·58	9·37	9·94	9·69	12·63	10·60	10·70	12·00	9·76	10·10	7·18	7·83	6·59	10·47	6·75	22·51
7. Number of persons employed for each £100,000 worth of gold obtained ...	1,229	1,225	1,186	1,209	1,233	1,188	1,185	1,264	1,304	1,317	1,442	1,435	1,270	1,188	1,156	1,151	1,165	1,178	1,093	1,237	1,309
8. Number of persons killed for each £100,000 worth of gold obtained ...	4·12	4·11	5·20	2·76	3·20	4·18	3·33	3·66	3·63	4·68	4·20	4·44	4·81	4·01	4·18	2·82	3·08	2·70	4·46	2·86	9·32
9. Average value (in shillings) of ore (gold obtained per ton crushed) ...	53·72	53·54	53·28	53·87	54·86	55·38	56·25	54·33	53·27	53·97	50·46	(a) 43·69	(a) 44·65	(a) 43·73	(a) 42·54	(a) 44·42	(a) 44·92	(a) 42·53	(a) 41·52	(a) 42·29	42·85

ITEMS	TRAN									
Year ...	1911	1912	1913	1914	1915	1916	1917	1918	1919	19
1. Number of separate accidents (fatal and serious) per 1,000 persons employed	10·11	10·75	11·50	10·79	10·67	10·40	9·97	10·18	12·09	13
2. Death rate per 1,000 persons employed above ground	1·46	1·49	1·44	1·00	1·12	1·13	0·78	1·07	0·68	0
3. Death rate per 1,000 persons employed below ground	5·58	4·96	4·82	4·16	3·93	3·83	3·34	3·12	3·16	3
4. Death rate per 1,000 persons employed (above and below ground) ...	4·33	4·02	3·96	3·35	3·27	3·22	2·59	2·47	2·41	2
5. Number of persons employed for each 100,000 tons of ore crushed ...	844	803	765	713	738	766	736	787	789	79
6. Number of persons killed for each 100,000 tons of ore crushed ...	3·65	3·23	3·03	2·39	2·41	2·47	1·99	2·05	1·99	2
7. Number of persons employed for each £100,000 worth of gold obtained ...	601	555	549	535	560	573	541	561	548	57
8. Number of persons killed for each £100,000 worth of gold obtained ...	2·60	2·23	2·17	1·79	1·83	1·84	1·46	1·46	1·38	1
9. Average value (in shillings) of ore (gold obtained per ton crushed) ...	27·98	28·95	27·90	26·65	26·32	26·74	27·15	28·02	28·70	28

(a) Represents the average value of gold obtained from current ore crushed only, and does not include value of gold obtained from re-treatment of old dumps as in previous years.

Table 11

1927	1928	1929	1930	1931	REMARKS
29·43	34·11	37·47	36·11	40·89	
0·33	1·14	0·94	0·64	0·68	
3·53	2·72	3·26	3·18	2·93	
2·75	2·24	2·58	2·47	2·31	
702	712	691	704	710	
2·01	1·66	1·86	1·81	1·71	
494	504	494	498	510	
1·41	1·18	1·33	1·28	1·22	
28·66	28·32	28·02	28·29	27·88	

List of mining properties leased, assigned or abandoned in the State of Mysore from January to December 1931.

Table 12.

A.—Leased.

NAME OF PROPERTY	SITUATION		Name of Lessee	Date of Grant	Registered No. of Lease	REMARKS
	Taluk	District				
Nil			Nil			Nil

B.—Assigned.

NAME OF PROPERTY	SITUATION		Registered No. of Lease	Name of Assignor	Name of Assignee	Date of Assignment	REMARKS
	Taluk	District					
Nil				Nil			Nil

C.—Abandoned.

NAME OF PROPERTY	SITUATION		Registered No. of Lease	Name of Lessee	Date of Abandonment	REMARKS
	Taluk	District				
Dodkittadahalli Block	Hosadurga ...	Chitaldrug ...	166	The Peninsular Minerals Co., of Mysore, Ltd. ...	27th March 1931	
Kenkere Block	Do ...	Do ...	167	Do	Do	
Sondenhalli Block	Chicknaikanhalli	Tumkur ...	168	Do	31st December 1931	
Shivasandra Block	Gubbi ...	Do ...	169	Do	Do	
Karekurchi Block	Tiptur ...	Do ...	170	Do	Do	

RECORD OF FATAL AND SERIOUS ACCIDENTS.

[MINING.]

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
6th January ...	6	The Mysore Gold Mine, Bowringpet Taluk, Kolar District.	9-15	2¼	.	1 B. Maury ...	25
6th January ...	4	Do ...	12	5	...	1 T. Narayanaswami	39
6th January ...	7	Do ...	16	1	...	1 A. Latchmanan...	55
11th January ..	8	Do ...	11-30	4½	...	1 Chinnathamby ...	30
15th January ...	12	Do ...	10	3	...	1 Muniswami ...	30
17th February ...	23	Do ...	10	3	1 B. Venkataraman *alias* Venkatramadoo.	...	35
21st February ...	21	Do ..	8-30	1½	--	1 A. Muthoo ...	25
22nd February ...	31	Do ...	13-40	7⅔	..	1 Buddappa ...	35
23rd February ...	24	Do ...	11-35	4⅔	1 P. Mottay *alias* Arjunan.	...	38

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.

Table 13.

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Fitter cooly ...	Skip road above the 284 ft. level, Pilot Shaft.	VI	Owing to the derailment of a riding bandy he fell down the shaft for some distance.	Wound of left elbow strain right hip and wound sole of foot Fracture of interna malleolus (right).
Machine mestri (M. 9,709).	No. 29 stope below the 3,226 ft. level S., Rowse's Shaft.	XIII	Through deepening a socket containing a small quantity of explosives.	Peppered wounds of chest wall, both arms, neck, face, scalp with penetrating wound into the trachea, foreign bodies and wounds in both eyes.
Stuff cooly ...	Chute, 44th level, Rowse's Auxiliary Shaft.	XIX	While pushing an over-loaded bandy, a stone from it fell on his foot.	Lacerated wound dorsum of left foot, last toe and metatarsal bone crushed and amputated.
Road cooly ..	Sink, 50 feet below the 76th level, Edgar's Auxiliary Shaft.	XIX	Owing to the tilting of the skip while being filled, his leg was jammed between it and a dividing.	Lacerated wound of middle of left thigh. muscles cut.
Stuff cooly ...	Drive, (main haulage) 76th level S., Air Shaft.	XI	A rockburst	Wound of scalp, forehead, with fracture of frontal bone, wound of mouth with fracture of upper maxilla with loss of two upper front teeth and wound of back, left arm and left hand.
Blaster, (M. 10,233 -- B. 7,106).	No. 51 stope below 47th level (Intermediate) S., Rowse's Shaft.	XV	While drilling, a piece of rock fell on his knee.	Six days old wound of left knee, joint opened. Died in hospital at 9-20 A.M., on 2nd July.
Hammerman ...	Blacksmith's shop (surface).	XXIII	While at work in the Blacksmith's shop, a chip of steel from a hammer struck his eye.	Penetrating wound of right upper eyelid and wound of eye ball.
Road cooly ...	Skip road below 48th level, Rowse's Auxiliary Shaft.	XVIII	While filling the skip it was suddenly hoisted and he was caught between it and the shaft timbers.	Contused abrasion of right hip and buttock. Fracture of pelvis, wound of thigh and penis.
Machine mestri, (M. 11,355).	No. 25 stope below the 54th level (intermediate) N., Air Shaft.	XI	A rockburst	Wounds of scalp, face and all over the body. Extensive lacerated wound of lower 3rd of left forearm, muscles injured and ulna fractured. Died in hospital at 3-40 A.M. on 24th February.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
23rd February ...	25	The Mysore Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	13	6	...	1 P. Armugam ...	30
11th March ...	36	Do ...	14-15	7¼	...	1 T. Gopal ...	34
13th March ...	39	Do ...	10	3	...	1 Singaram ...	35
14th March ...	38	Do ...	9-30	2½	...	1 H. Kunjalam ...	32
23rd March ...	45	Do ...	13-05	6	...	1 Murugase ...	40
25th March ...	46	Do ...	11	4	...	1 Varatharaju ...	26
30th March ...	50	Do ...	11	4	...	1 K Yellan ...	52
4th April ...	51	Do ...	9-30	2½	...	1 Marimuthoo ...	23
16th April ...	58	Do ...	16-30	1½	...	1 Veeraragoo ...	22
20th April ...	59	Do ...	12	5	...	1 Dhanapal ...	19
21st April ...	61	Do ...	15-35	8 7/12	16 B. Venkatigan *alias* Ramadoo.	...	32

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Timber cooly ...	Drive, 53rd level N., Ribblesdale's No. 1 Incline Shaft.	XIX	While fixing a tunnel set, a piece of rock fell on him from above.	Wound lower 3rd of left forearm, extensor tendon cut.
Handjumper cooly	No. 8 stope below the 48th level S., McTaggart's Main Winze.	XI	A burst of rock	Wound of scalp, bone chipped and wound of left knee, joint opened.
Jackhammer cooly.	Sink, 30 feet below the 73rd level, Edgar's Sub-Vertical Shaft.	XIX	Owing to fouling of the hoisting rope with a lining rope, a portion of the latter broke and fell into the sink.	Contusion of back, injury to spine, contused wound of back, left elbow and forearm, contusion of right calf.
Handjumper cooly	Drive, 47th level N., (Intermediate), McTaggart's North Winze.	XI	A rockburst	Compound fracture both bones of right leg, fibula comminuted, internal malleolus burst through skin and wound dorsum of right foot.
Vacuum pump motor driver.	Water pump, Slimes Plant, (surface).	XX	His hand was caught between the belt and the revolving shafting.	Compound comminuted fracture of middle 3rd of right forearm, left thumb crushed and amputated.
Mill Oiler ...	Stamp Mill (surface)	XX	His hand was caught between the tappet and the cam.	Punctured wound of left elbow (inside), joint opened.
Blaster (M. 9,810—B. 6,892).	No. 36 stope below the 34th level N., McTaggart's Auxiliary Shaft.	XIX	While barring down loose, a piece of rock fell on his thigh.	Lacerated wound of middle of left thigh, muscles cut.
Unloading cooly	Main haulage, 51st level, Edgar's Shaft.	XVII	A wheel of a bandy passed over his foot	Extensive lacerated wound of sole of right foot.
Stuff cooly ...	Drive, 76th level S., Rowse's No. 2 Auxiliary Shaft.	XI	A burst of rock ...	Lacerated wound of right leg with simple fracture both bones middle of right leg.
Timber cooly ..	Drive, 46th level S., McTaggart's Main Winze.	XI	A burst of rock ...	Wound of lower 3rd of left leg, tendo-achilles cut and wound over left scapula.
Handjumper mestri (M. 10,350—B. 8,132).	No. 57 stope below 2,120 ft. level N., Tennant's Shaft.	XI	A very heavy rockburst ...	Portion of dismembered body recovered on the 13th and 14th June at 2 P.M.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
21st April—*contd.*	61	The Mysore Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	15-35	$8\frac{7}{12}$	M. Muniswami ...	...	24
					M. Venkatappa ...	...	22
					S. Singaram ...	...	30
					G. Muniswami ...	...	20
					P. Sholay ...	...	45
					S. Chinnayan ..	...	30
					P. Muniappa ...	..	43
					A. Kalappa ...	...	45
					T. Muniswami ...	...	34
					T. Thimma ...	.	27
					S. Muniswami ...	...	34
					S. Thimmadoo .	..	32
					A. Mottay *alias* Mottigan. ..	...	45
					P. Rangaswami ..	...	45
					and		

OF MYSORE DURING THE YEAR 1931.—*Continued* Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Handjumper cooly	No. 57 stope below 2120 ft. level N., Tennant's Shaft.	XI	A very heavy rockburst ...	Portions of the body were recovered on 22nd and 25th June.
Do ...	Do ...	Do	Do ...	Body recovered in part at 2-5 P.M. on 5th June.
Do ...	Do ...	Do	Do ...	Body recovered at 9 A.M., on 4th June.
Stuff cooly ...	Do ...	Do	Do ...	Body recovered at 7-15 P.M. on 24th June.
Timber mestri (M. 7,980).	Do ...	Do	Do ...	Contused wound of right leg and foot with oedema, threatened gangrene of foot. Died in hospital at 5-10 P.M. on 30th April. "*Septicæmia.*"
Handjumper cooly	Do ...	Do	Do ...	Multiple injuries all over the body. Brought up at 6-15 P.M. on 22nd April.
Blackrock mestri (M. 12,440).	No. 36 stope below 2,550 ft. level N., Tennant's Shaft.	Do	Do ...	Body not yet recovered.
Blackrock cooly ..	Do ...	Do	Do ...	Do
Do ...	Do ...	Do	Do ...	Do
Do ...	Do ...	Do	Do ...	Do
Handjumper cooly	Drive, 2,240 ft level N., Tennant's Shaft.	Do	Do ...	Body recovered at 3-10 p.m. on 13th October.
Do ...	Do ...	Do	Do ..	Body recovered at 10-10 P.M. on 13th October.
Stuff mestri, (M. 9,846).	Do ...	Do	Do ...	Multiple injuries all over the body.
Stuff cooly ...	Do ...	Do	Do ..	Wound of scalp and face, compound fracture of both bones middle of right leg, right 2nd and 3rd toes crushed; wounds of right great toe, left leg and foot. Died in hospital at 2-30 P.M. on 22nd April.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
21st April—(*contd.*)	61	The Mysore Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	15-35	$7\frac{7}{12}$	Ponnurangam ...	...	30
					...	4 Karuppan ..	35
					...	Thandoni ...	22
					...	Appakutty ...	28
						and	
				$8\frac{7}{12}$	...	T. Velayutham ...	20
6th May ...	66	Do ...	13-50	$6\frac{5}{6}$	1 K. Latchmanan..	...	22
7th May ...	69	Do ...	17-30	$2\frac{1}{2}$	...	1 Kothandapany ...	35
13th May ...	70	Do ...	9-45	$9\frac{3}{4}$	...	1 Palany ...	35
13th May ...	73	Do ...	13	6	...	1 M. Muniswami .	52

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.—*Continued*

Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Natue of Injury
Unloading cooly...	Plat, 2,240 ft. level, Gilbert's Shaft.	XI	A very heavy rockburst ...	Lacerated wound with compound fracture of both bones above left ankle, wounds both knees and both hands with compound fracture of last metacarpal (right), fracture of left ribs with surgical emphysema. Died in hospital at 7-45 P.M. the same day.
Do ...	Do ..	Do	Do ...	Lacerated wound dorsum of left foot, contusion left ankle, wound of scalp, right elbow (out) and abrasion left shoulder fractured scaphoid line left foot.
Do ...	Do ..	Do	Do ...	Wound of left wrist, tendons injured and joint opened.
Bell boy ..	Plat, 51st level, No. 1 Incline Shaft.	Do	Do ..	Lacerated wound dorsum of left foot with compound fracture of last two metatarsals and wound middle of left forearm.
Stuff cooly ...	Drive, 2,240 ft. level N., Tennant's Shaft.	Do	Do ...	Contused wound of face, wounds of both arms and feet and contusion of right hip.
Handjumper cooly	No. 60 stope below the 46th level N., Rowse's Auxiliary Shaft.	XV	He fell away from part way down the chute pass of the stope.	Fracture of head with injuries all over body.
Jackhammer cooly	Sink, 270 feet below the 55th level, Edgar's Sub-Vertical Shaft.	XIX	While clearing stuff a piece of rock fell on his hand.	Three days old wound of left wrist with cellulitis of hand and forearm.
Timber mestri, (M. 9,733).	Drive, 31st level N., Ribblesdale's Shaft.	XIX	While barring down loose in the hanging wall, some packing from above fell on him.	Wounds of scalp, forehead, bone exposed and penetrating wound of upper lip, wounds of right forearm and contused wound of left elbow.
Blackrock cooly	No. 42 stope below the 45th level S., Ribblesdale's Auxiliary Main Winze.	XIX	A burst of quartz ...	Wound of left knee, joint opened.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
31st May ...	84	The Mysore Gold Mine, Bowringpet Taluk, Kolar District —*contd.*	4-30	5½	...	1 S. Murugan ...	20
4th June ...	90	Do ..	19	5	...	1 N. Dhanapal ...	30
6th June ...	89	Do ...	13-05	6	...	1 Natesan ...	25
13th June ...	93	Do ...	10	3	...	1 K. Hyderoo ...	21
21st June ...	96	Do ...	1	10	...	1 J. Gowran ...	34
5th July ...	99	Do ...	11-45	4¾	1 Syed Ali ...	...	35
20th July ..	100	Do ...	15	2	1 T. Ammakannoo (female.)	..	28
22nd July ...	101	Do ...	6	7	...	1 Kondiah ...	25
22nd July ...	102	Do ...	9-45	2¾	3 K. Gundoo ... *alias* Chinnapian	...	50
					K. Sanjeevi ... and	...	30
					Chinnaswami ...	...	22
28th July ...	106	Do ...	15-45	8	1 A. Chadayandy...	...	25
10th August ...	118	Do ...	10	3	...	1 Perumal ...	0

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Stuff cooly ...	Chute, 46th level S., Rowses' Auxiliary Shaft.	XIX	While pulling a casuarina pole stuck up in the chute, his arm was caught between it and a chute timber.	Simple fracture of both bones lower 3rd of right forearm.
Stuff cooly ...	Crosscut W., to Edgar's Sub-Vertical Shaft, 51st level.	Do	While clearing stuff, a piece of rock fell on his knee.	Punctured wound of left knee. Septic.
Surface gang cooly	Cement store Room, Edgar's Shaft yard (surface).	XXIII	While removing cement bags from a pile, a bag rolled on his arm.	Simple fracture of middle of left humerus.
Handjumper cooly	No. 65 stope below the 46th level S., McTaggart's Main Winze.	XV	While clearing stuff, a piece of rock fell on his leg.	Extensive lacerated wound of lower third of left leg, tendo-achilles cut and oscalcis chipped.
Machine cooly ...	Rise B. 28th level N., Tennant's Shaft.	XIX	While drilling, some fines fell into his eye.	Corneal ulcer of right eye due to an old wound (with half vision)--(left eye blind for 10 years due to small pox.)
Handjumper mestri (M. 12,482—B. 8346).	On the road between McTaggart's Vertical Shaft and the Kolar Gold Field Hospital.	XXII	He fell off a lorry in motion ...	Fracture of base of skull with contusion of scalp. Died in hospital at 7-45 P.M. the same day.
Cooly ...	Blackrock dump, Edgar's Shaft (surface).	Do	Run over by a moving truck ...	Lacerated wound of upper 3rd of right thigh. muscles injured with compound fracture of right femur and simple fracture of middle of left thigh. Died in hospital at 7 P.M. on 20th July.
Stuff cooly ...	Sink, No. 1 Winze, 59th level N., Air Shaft.	XV	While hoisting stuff, a piece of rock fell on his knee.	Wound of right knee, joint opened.
Unloading mestri, (M. 1,735).	Crosscut W., in Drive N., 3,226 ft. level, Ribblesdale's section.	XI	A series of very heavy rockbursts ...	Fracture of skull and wounds all over body.
Unloading cooly...	Do ...	Do	Do ...	Deep wound of left temple and severe wounds all over body.
Do ...	Do ...	Do	Do ...	Abrasions all over body.
Timber cooly ...	Plat, 44th level, McTaggart's Vertical Shaft.	VIII	While attempting to cross the shaft, he slipped and fell 75 feet.	Fracture of skull.
Stuff cooly ...	Drive, 37th level N., Edgar's Shaft.	XIX	While clearing stuff in the level, a piece of rock fell on his leg.	Right great toe and 1st metatarsal crushed and neglected ulcer of left 2nd toe.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
10th August ...	117	The Mysore Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	11-15	$4\frac{1}{4}$	...	1 E. Muniswami ...	40
28th August ...	122	Do ...	15-55	$8^{11}/_{12}$	...	1 Irudayaswami ...	24
29th August ...	123	Do ...	11-30	$4\frac{1}{2}$	1 K. Perumal ...	...	35
6th September ...	126	Do ...	11-15	$4\frac{1}{2}$	...	1 T. Abdul Jabbar	34
19th September...	133	Do ...	20-45	$5\frac{3}{4}$	...	1 V. Mandy ...	30
28th September...	135	Do ...	9-40	$2\frac{2}{3}$	2 K. Narayana Nair	...	24
					and		
					P. Raman Nair ...	...	20
						2 N. Devaraj ...	23
						and	
						N. Rangaswami ...	35

OF MYSORE DURING THE YEAR 1931—*Continued.* **Table 13**—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Blaster, (M. 13,626—B. 8,884.)	No. 56 stope below the 18th level N., Gilbert's Shaft.	XIX	While barring down loose, a piece of rock fell on his foot.	Lacerated wound dorsum of right foot, 3rd toe and its metatarsal crushed and amputated, compound fracture of 4th metatarsal.
Cooly ...	Electric Tram Lines near Marikuppam Post Office.	XXII	Run over by a moving trolley ...	Extensive lacerated wound of sole of left foot.
Assistant fitter ...	Old Cyanide Plant, (surface).	XX	Struck by the revolving handle of a winch.	Contusion of abdomen and abrasion of right forearm. Died in hospital at 5-15 A.M. on 1st September.
Unloading cooly	Skip road, 10 feet below the 45th level plat, Ribblesdale's Auxiliary Main Winze.	VI	While riding up in a timber skip, his leg came in violent contact with a roller in the shaft.	Compound fracture both bones upper third of left leg and simple fracture lower third of left thigh.
Stuff mestri (M. 13,632).	Chute below 48th level plat, Ribblesdale's Auxiliary Main Winze.	XIX	While filling a skip, a piece of quartz fell on his arm.	Fracture of lower end of left ulna.
Machine mestri, (M. 7,825—B. 5,606).	Junction of crosscut E., with reef; 3,226 ft. level, Edgar's Shaft.	XI	A rockburst	Fracture of skull—Body recovered at 4-50 P.M. the same day.
Machine cooly ...	Do ...	Do	Do	Multiple wounds all over body. Body recovered at 5-20 P.M. on 29th September.
Machine mestri, (M. 11,098—B. 7,534.)	Do ...	Do	Do	Wound of scalp, bone exposed, lacerated wound of lower 3rd of right leg with compound fracture of fibula and wounds of both legs and left thigh.
Timber mestri, (M. 10,327.)	Do ...	Do	Do	Wound of left knee, joint opened. Wounds over left scapula, left forearm, dorsums of hand and foot.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
20th October ..	149	The Mysore Gold Mine, Bowringpet Taluk, Kolar District —*contd.*	6-15	8¼	1 P. Manickam ...	...	25
						1 Kondiah ...	22
21st October ..	151	Do ...	15-30	8½	...	1 P. Veerasami ...	35
2nd November ...	164	Do ...	7-30	¾	3 Appadoray ...	...	30
					V. Duraiswami	...	25
					and		
					S. Muthu ...	...	30
						2 V. Aundy ...	31
						and	
						V. Murugan ...	30
4th November ...	165	Do ...	9	2	...	1 Manickam ...	36

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.

Table 13.

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Jumper cooly ...	Cage road below 59th level, Air Shaft.	VIII	While riding up in the cage, they were thrown off their seats into the Shaft.	Head smashed and wounds all over body.
Stuff cooly ...	Do ...	Do	Do	Simple fracture of both bones, upper 3rd of right forearm, abrasion of elbow, wounds of outer canthus, left eye and over left clavicle.
Handjumper cooly.	No. 66 stope below the 47th level S., Ribblesdale's Auxiliary Shaft.	XIII	Through drilling into a socket containing portion of an unexploded charge of blasting gelatine.	Foreign bodies in both eyes with haemorrhage into the anterior chamber of right eye and peppered wounds of chest and abdominal walls and both legs.
Mason ...	Sink, 1,100 feet below the 65th level, Edgar's Sub-Vertical Shaft	XI	Rockburst	Deep wound of left temple and injuries all over the body.
Jackhammer cooly	Do ...	Do	Do	Fractured skull and wounds all over the body.
Do ...	Do ...	Do	Do	Right side of chest wall and upper extremity crushed. Died in hospital the same day at 9·15 A.M.
Boss-boy (M. 13,538—B. 8,845.	Do ...	Do	Do	Wounds of scalp with depressed fracture of skull, contused wound with compound fracture of left scapula. Punctured wound of left knee, contused swelling of left calf and wound of right ear.
Jackhammer cooly	Do ...	Do	Do	Fractures of all metacarpals of right hand; (fracture 1st 2nd and 3rd metacarpals)—contused wounds of right 1st four fingers and wound of scalp.
Timber cooly ...	Drive, 3,226 ft. level N., Ribblesdale's Shaft.	XIX	While lifting a big piece of rock, his hand was caught under it.	Simple fracture lower 3rd of left radius and abrasion of left forearm.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
17th November...	178	The Mysore Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	11-30	4½	...	1 K. Muniswami ...	42
19th November...	179	Do ...	15-30	8½	...	1 Ponnuswami *alias* Aseervatham.	36
1st December ...	182	Do ...	8	1	...	1 Masojee Rao ...	35
4th December ...	184	Do ...	2-30	3½	3 A. Armugam ...	...	20
					G. Oomajee Rao...	...	46
					and		
					C. Murugase ...	...	18
						1 V. Maduray ...	45
14th December ...	188	Do ...	14-30	7½	...	1 K. Abboy ..	19
17th December ...	192	Do ...	20-45	5¾	...	1 Silvamuthu ...	45
20th December ...	193	Do ...	8	1	...	1 B. Kannugan ...	22
25th December ...	196	Do ...	11.30	3½	1 Kunji Mohamed	...	40
28th December ...	200	Do ...	15-30	½	...	1 Paliyam ...	18

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.

Table 13.

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Handjumper cooly	No. 11 stope below the 39th level N., Rowse's Shaft.	XV	While cleaning stuff, a piece of rock fell on his foot from above.	Wound dorsum of left foot, muscles and tendons cut with fracture of 4th metatarsal bone.
Machine mestri, (M. 6,954—B. 4,886).	Rise "B", 48th level S., Rowse's Auxiliary Shaft.	XV	While climbing up by ladder, a piece of rock fell on his arm.	Wound above left wrist, muscles, tendons, arteries and nerves cut.
Handjumper mestri, (M. 10,008—B. 6,989).	Drive, 51st level S., of No. 1 Incline Shaft.	XVII	A wheel of a bandy ran over his foot.	Lacerated wounds of right great and 2nd toes, joints opened and wound of sole of foot.
Unloading cooly...	48th level plat, Ribblesdale's Auxiliary Main Winze.	XI	A heavy rockburst	Body recovered at 5 o'clock on 5th December.
Unloading head mestri, (M. 13,070).	Do ...	Do	Do	Body recovered at 3-15 P.M. on 24th December.
Unloading cooly...	Do ...	Do	Do	Body recovered at 4-10 P.M. on 25th December.
Unloading mestri, (M. 19636).	Do ...	Do	Do	Contused swelling and abrasions both legs.
Blackrock cooly...	Drive, 37th level S., Rowse's Shaft.	XIX	While breaking a big piece of rock a chip flew into his eye.	Penetrating wound of right eye with prolapse of iris.
Cotterman ...	Drive N., (foot wall) 45th level S., Ribblesdale's Auxiliary Main Winze.	XIX	Owing to the collapse of the bar, he fell on the rock drill and the jumpers close by.	Contused wound of right side of chest-wall with fracture of right 6th, 7th and 8th ribs.
Stuff cooly ...	Drive N., from cross-cut E., 76th level main haulage, Auxiliary Shaft.	XIX	While clearing stuff in the drive, a piece of rock fell on his leg.	Lacerated wound of right ankle, joint opened and bones chipped; abrasion of left leg.
Handjumper cooly.	Stope below the 44th level S., Ribblesdale's South Section.	XV	While climbing up by ladder, he slipped or lost his hold and fell into the stope.	Wound of left eye-brow, bleeding from ear and fracture base of skull. Died in hospital at 4-20 A.M. on 7th January 1932.
Concreting cooly.	Plat, 51st level, No. 1 Incline Shaft.	XIX	While removing a granite stone from a pile, another rolled down on his foot.	Contused swelling of dorsum of right foot, fractures of right 1st, 2nd, 3rd and 4th metatarsals.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
29th December ...	198	The Mysore Gold Mine, Bowringpet Taluk, Kolar District—*concld.*	0-30	1½	...	1 V. Munirathnam.	20
2nd January ...	1	The Champion Reef Gold Mine, Bowringpet Taluk, Kolar District.	10-30	2	1 N. Muniswami ...	...	25
5th January ...	3	Do ...	1-30	6½	1 Venkataraman ...	...	25
16th January ...	11	Do ...	13	6	1 Dhanapal ...	...	25
6th February ...	18	Do ...	10	3	...	1 M. Chinnapian ...	35
15th February ...	19	Do ...	4	5	...	1 A. Karian ...	25
6th March ...	35	Do ..	21	6	...	1 M. Karuppan ...	40
7th March ...	34	Do ...	11-30	4½	...	1 V. Chappani ...	45
16th March ..	43	Do ...	11-45	4¾	...	1 G. Muniswami ...	19
19th March ...	44	Do ...	13-30	6½	...	1 Natesan ...	25
29th March ...	48	Do ...	12-30	5½	...	1 Varathan ...	48
30th March ...	47	Do ...	12-30	5½	1 K. Muniswami ...	...	50
31st March ...	57	Do ...	22	7	...	1 K. Balakrishnan.	32
20th April ...	62	Do ...	14	7	...	1 P. Ponnuswami.	40

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Stuff cooly ...	600 ft. level plat, Pilot Shaft.	XIX	While refilling a lamp with carbide there was a blaze which burnt his face.	Burns of face and eyes.
Tea boy ...	Ladderway in stope above the 61st level N., Carmichael's Secondary Shaft.	XV	While climbing up by ladder, he slipped and fell about 12 feet.	Fracture of base of skull. Died in hospital at 12-40 P.M. the same day.
Concreting cooly.	No. 3 Winze below the 72nd level S., Glen's Section.	XV	He fell down the winze—a distance of 102 feet.	Wounds all over the body. Died on the way to hospital.
Machine cooly ...	No. 2 Winze below the 72nd level S., Glen's Section.	XV	While opening an air-valve in the Winze, he lost his balance and fell 100 feet.	Wounds all over the body.
Machine cooly ...	Rill stope above the 69th level N., Carmichael's Secondary Shaft.	III	While drilling, some quartz fell on his arm and leg from the working face.	Wound of right knee, tendon of quadricep semuries cut and wound middle of left forearm.
Stuff cooly ...	Plat, 73rd level, North Development Winze.	XVII	The wheel of a bandy ran over his hand.	Lacerated wound with compound fracture of proximal phalanges of middle, ring and little fingers of right hand, lacerated wound of right index finger.
Stuff cooly ..	Drive, 73rd level N., No. 1 Winze, Glen's Section.	XVII	While pushing a trolley he slipped and fell against the rail.	Fracture at the junction of middle and lower 3rd of left ulna.
Machine cooly ...	Rill stope above the 61st level N., Carmichael's Secondary Shaft.	XIX	While barring down loose, a piece of rock fell on his leg.	Simple fracture of both bones of middle of right leg and contusion of left ankle.
Stuff cooly ...	Drive, 68th level S., Carmichael's Secondary Shaft	XVII	Whilst tipping a bandy of sand, his hand was caught between the bandy and the foot wall.	Colles' fracture of left wrist.
Machine cooly ...	Rill stope above the 69th level N., Carmichael's Secondary Shaft.	XIX	While drilling, a piece of quartz fell on his knee.	Septic infection of left kneejoint due to three days old injury.
Pipe mestri, (M. 6,253).	Drive, 59th level S., Glen's Secondary Shaft.	XIX	While cutting a trench in the level for the water pipe, an air pipe from the back fell on him.	Fracture of right internal malleolus.
Machine cooly ...	Drive, 72nd level N., Glen's Section.	XV	While at work in the bottom of the winze an empty bucket fell on his head.	Head crushed.
Do ...	Rill stope above the 67th level S., Carmichael's Secondary Shaft.	XV	While drilling, a piece of quartz fell on his ankle.	Wound of left inner ankle.
Do ..	Stope below the 13th level S., Tennant's Shaft.	XIX	While hoisting a bucket of quartz, his thumb was caught between the bucket and the ladder.	Compound fracture of left thumb.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
24th April ...	63	The Champion Reef Gold Mine, Bowringpet Taluk. Kolar District—*contd.*	13-30	4½	...	1 Kuppan ...	25
28th April ...	65	Do ...	11-0	4	...	1 Gnanarajoo ...	18
7th May ...	68	Do ...	19-30	4½	...	2 Muthuswami ..	27
						and	
						Singaram ...	30
13th May ...	72	Do ...	18-00	3	...	1 M. Perumal ...	40
19th May ...	78	Do ...	5-15	6¼	...	1 P. Thumboo ...	30
26th May ...	79	Do ...	18-00	3	...	1 C. Perumal ...	38
30th May ...	80	Do ...	11-30	4½	...	1 Kristan ...	29
1st June ...	82	Do ...	10-40	3⅔	...	T. Maury ...	35

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.—*Continued* Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Machine cooly ...	Drive, 59th level N., Carmichael's Secondary Shaft.	XIV	Due to the explosion of a small quantity of blasting gelatine.	Penetrating wound of left eye, iris prolapsed with haemorrhage into the anterior chamber and peppered wounds of face, chest, both arms, right leg and foot.
Cleaner ...	Crosscut E., 40th level, Heathcote Shaft.	XIX	His leg was caught between the engine chamber door and its frame.	Extensive lacerated wound right heel and contused wound of ankle.
Machine cooly ...	Crosscut E., 74th level, Heathcote Shaft.	XIV	Due to the explosion of an unexploded charge of blasting gelatine.	Peppered wound of scalp and face, foreign body in both eyes, penetrating wound of right eye with prolapse of iris. Peppered wound of chest, right shoulder, both forearms and hands, right knee and both feet.
Do ...	Do ...	Do	Do	Peppered wounds of scalp, foreign body in both eyes with penetrating wounds. Peppered wounds of chest-wall, both arms and hands, right thumb and index finger smashed, index finger amputated and wounds of both legs and feet.
Concreting mestri, (M. 9,106).	Drive, 72nd level S. of No. 2 Winze, Glen's Section.	XIX	While drilling, a piece of rock fell on his knee.	Wound of left knee, joint opened.
Machine cooly ...	No. 1 Winze, 73rd level S., Glen's Section.	XV	While connecting a hose to an air pipe, he overbalanced and fell a distance of 10 feet.	Fracture of astragalus and fracture of internal malleolus of right foot.
Machine cooly ...	Crosscut E., 74th level, Heathcote Shaft.	XIX	While drilling, a piece of rock fell on his leg.	Wound of lower third of right leg, tendo-achilles completely cut.
Machine cooly ...	Crosscut W., 74th level, Heathcote Shaft.	XIX	While clearing stuff, a piece of rock fell on his leg.	Wounds of lower third of right leg, knee and tendo-achilles cut.
Timber cooly ...	Stope below the 62nd level N., Carmichael's Secondary Shaft.	I	Fall of hanging wall	Left leg crushed. Amputated at the lower 3rd of thigh.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
4th June ...	87	The Champion Reef Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	9-30	2½	...	1 Narasimhaloo ...	38
4th June ...	96	Do ...	11-15	4¼	...	3 V. Chinnathamby	32
						Nathamuny ...	26
						and	
						T. Murugase ...	45
16th June ...	94	Do ...	10	3	...	1 Annamalay ...	28
30th June ...	97	Do ...	12-30	5½	...	1 Narayanaswami.	36
26th July ...	105	Do ...	14-30	7½	...	1 W. Ponnan ...	35
31st July ...	110	Do ...	5-45	6¾	...	1 Muniswami ...	30
1st August ...	112	Do ...	3	4	...	1 Chinnadurai ...	20

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.—*Continued* Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Natue of Injury
Stuff cooly ...	Rill stope above the 67th level N., Carmichael's Secondary Shaft.	XIX	While clearing stuff, a lump of concrete fell on his back.	Contused swelling of lower 3rd of back with fracture of spine and wound of upper part of back.
Machine mestri... (M. 13,135—B. 8,688).	No. 5 Winze, 70th level S., Glen's Secondary Shaft.	XI	A rockburst	Wounds with compound fracture of both bones of lower 3rd of left leg, wounds dorsum of left foot, right knee, leg and contused wound dorsum of right foot.
Machine cooly ...	Do ...	Do	Do ...	Wound of left knee joint opened, wounds of chest-wall, left elbow, right knee, right groin and middle of left leg.
Machine mestri (M. 4,163—B. 2,085.)	Do ...	Do	Do	Wound of scalp, right forearm, middle of left thigh and fracture internal malleolus right.
Machine cooly ...	Ladderway above the 74th level plat, North Development Winze.	VIII	While fixing a 2" pipe to the air main, he overbalanced and fell into the sink 24 feet below.	Contused swelling of right hip and buttock, fracture of horizontal ramus and depending ramus of right pelvic bone.
Cageman ...	Plat, 64th level, Heathcote Shaft.	XVII	While pulling a bandy from the front, a wheel passed over his foot.	Right great and tip of 2nd toe crushed and amputated and wound of tip of 3rd toe.
Timber mestri, (M. 13,362.)	Drive, 23rd level S., Tennant's Vertical Shaft.	XIX	While tightening a timber, it swerved causing him to overbalance and he fell 7 feet.	Fracture of 6th, 7th and 8th ribs right side wounds forehead and angle of left eye, wound middle 3rd right forearm and lower 3rd of left arm.
Jumper cooly ...	Ladderway in No. 2 Winze below the 71st level S., Glen's Section.	XV	While releasing a hitched up bucket in the winze, he overbalanced and fell 20 feet.	Lacerated wound of scalp, right index finger, wounds of lower 3rd of right leg, dorsum of foot, left-shin, left inner ankle and abrasions of right buttock.
Stuff cooly ...	Drive, 64th level S., Carmichael's Secondary Shaft.	XIX	While pushing a bandy, he tripped against a sleeper and fell on the tramline.	Contused swelling of left shoulder, fracture of clavicle in two places.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
5th August ...	113	The Champion Reef Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	20-10	$5\frac{1}{6}$	...	1 Murugase ...	35
15th September...	129	Do ...	12	5	...	1 N. Ponnuswami.	40
21st September...	131	Do ...	18-20	$3\frac{1}{3}$	2 N. Periaswami ..	...	45
					and		
					Kulasekharan ...	...	33
6th October ...	140	Do ...	15-45	8	1 D. Arulappan ...	...	45
13th October ..	146	Do ...	13	6	...	1 P. Chinnappan ...	33
23rd October ..	155	Do ...	23-30	$\frac{1}{2}$	...	1 S. Armugam ...	39
24th October ..	160	Do ...	5	6	...	1 Chinnathamby ...	28
30th October ...	163	Do ...	9-30	$2\frac{1}{2}$	...	1 Ponnuswami ...	28

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.

Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Concreting cooly	Drive, 73rd level N., Glen's Section.	XI	While breaking a big piece of rock, a chip flew into his eye.	Penetrating wound of right eye, with haemorrhage into anterior chamber.
Stuff cooly ...	Drive, 70th level N., Carmichael's Secondary Shaft.	XI	A burst of quartz	Lower end of right leg and foot crushed. Amputated at the site of election.
Machine mestri, (M. 9,198—B 6,630).	Rill Stope above the 62nd level N., Carmichael's Secondary Shaft.	XI	A burst of quartz	Wounds of right and left hands, fracture of left leg and multiple injuries all over the body.
Machine cooly ...	Do ...	Do	Do	Head smashed and crushing injuries all over the body.
Machine cooly ...	No. 3 Winze below the 73rd level, Glen's Section.	XV	While climbing up by ladder he slipped and fell into the sink.	Fracture of right 6th and left 4th and 5th ribs with surgical emphysema and wounds of scalp, right elbow, left groin and over left tendo achilles. Died in hospital on 7th October.
Machine cooly ...	Sink, 120 feet below the 70th level, Ventilation Winze, Carmichael's Secondary Shaft.	X	While cleaning stuff in the sink a piece of rock fell on him from above.	Contused swelling over right scapula and fracture of right 7th rib with surgical emphysema.
Machine cooly ..	Drive, 74th level S., Heathcote Shaft.	XI	A burst of quartz	Extensive lacerated wound of middle third of left thigh, wound of upper, middle and lower 3rd of legs and wound of middle of chest-wall.
Machine cooly ...	Drive, 74th level N., North Development Winze.	XIX	While drilling, a piece of quartz fell on his thigh.	Deep wound of lower 3rd of left thigh.
Concreting cooly	Rill stope above the 68th level S., Carmichael's Secondary Shaft.	XI	A rockburst	Compound fracture both bones of right leg, muscles injured; wound of left leg with simple fracture both bones of lower third of left leg and contused wounds of left eye-brow and heel and right elbow.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
4th November ...	170	The Champion Reef Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	11-30	4½	...	3 Chinnapian ...	33
						P. Kuppuswami...	26
						and	
						Karumbathiam ...	40
16th November ...	177	Do ...	19-30	4½	...	1 Ram Singh ...	50
29th November...	181	Do ...	13-45	6¾	...	1 Muniswami ...	25
15th December ...	190	Do ...	8	1	...	1 Krishnan ...	21
17th December ...	201	Do ...	6	7	...	1 A. Munian ...	45
24th December ...	199	Do (*concld*).	9-35	$2^{7}/_{12}$	...	1 V. Narayanaswami.	28
15th January ...	10	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District.	13-30	6½	...	1 D. Rangan ...	45
21st January ...	15	Do .	12-50	5⅚	...	1 T. Chamundy ...	40
23rd January ...	14	Do ...	11-25	$4^{5}/_{12}$	12 O. Muniappa ...	...	35
					O. Muniswami...	...	25

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.—*Continued*

Table 13—*Continue*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Natue of Injury
Timber cooly ...	Rill stope above the 65th level S., Carmichael's Secondary Shaft.	XI	A rockburst	Wounds of scalp, middle of right forearm and right knee joint opened.
Machine cooly ...	Do ...	Do	Do	Contused abrasion left side of face, back, upper 3rd of right thigh, lower 3rd of left leg and contused swelling right arm and shoulder.
Timber cooly ...	Do ...	Do	Do	Wounds both legs, face; multiple wounds all over the body and contusion back.
Concreting cooly	Sink, 40 feet below the 73rd level, South Development Winze.	XIX	While breaking a large piece of rock, a chip struck him on the knee.	Wound of left knee, joint opened.
Timber cooly ...	Winze, 68th level N., Carmichael's Secondary Shaft.	XV	While pushing a bandy along the level, he fell through a manhole into a rill stope below.	Wound of left knee, joint opened, wound of scalp, chin and right knee and Pott's fracture right.
Pipe cooly ...	General Stores (surface).	XXIII	While rolling a rope drum, his hand was caught between it and a post.	Simple fracture of lower ends of both bones of right forearm.
Blaster (B. 1,229).	Stope above the 73rd level N., North Development Winze.	XV	While examining the working face after a blast a stone fell on his leg.	Eight days old wound of right inner ankle with cellulitis of leg and foot.
Road mestri (M. 12,414.)	Rise, 70th level N., Carmichael's Secondary Shaft.	XI	A burst of quartz ...	Wounds of right knee, leg, foot and tendo—achilles partly cut.
Handjumper mestri, (M. 8,936—B. 6,490).	No. 33 stope below the 67th level N., Taylor's Section.	1	Fall of ground from the hanging wall.	Left knee joint with bones crushed and amputated at the thigh.
Handjumper cooly (M. 12,265—B. 8,241).	No. 23 stope below the 55th level N., Bullen's Incline Shaft.	XIII	By the explosion of a small quantity of blasting gelatine.	Peppered and scorched wounds of face, forehead, chest-wall and foreign bodies in both eyes.
Handjumper cooly	Stope below the 66th level N., Oakley's Section.	XI	A very heavy rockburst	Deep wounds of scalp, both knees and right side of hip.
Do ..	Do ...	Do	Do ...	Fracture of skull, left humerus, deep wound of left foot and abrasions all over the body.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
23rd January—(*contd*).	14	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District—*contd.*			Pillappa ...	...	45
					C. Perumal *alias* Thimmiah.	...	30
					V. Perumal ...	...	36
					T. Varadan ...	...	40
					Swaminathan ...	...	30
					V. Palayam ...	...	22
					...	7 L. Jacob ...	35
					P. Veloo ...	...	35
					K. Moideen Kutty.	...	50
					C. Parasuraman ...	...	35
					and		
					P. Shanmugam ...	...	25

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Handjumper cooly	Stope below the 66th level N., Oakley's Section.	XI	A very heavy rockbust ...	Penetrating wound of left thigh, muscles cut, wound of right temple, both ears torn, wounds of scalp and multiple injuries all over the body.
Timber mestri (M. 9,712—B. 6,842).	Drive, 67th level N., Oakley's Section.	Do	Do	Fracture of skull, right temple, right ear torn and fracture of spine.
Timber cooly ...	Do ...	Do	Do ...	Deep wound of scalp, cranium exposed multiple injuries all over the body.
Stuff cooly ...	Do ...	Do	Do ...	Multiple injuries to head and body. Body recovered on 24th January 1931 at 2-45 P.M.
Timber cooly ...	Do ...	Do	Do ...	Wound of forehead, left knee, contusion of left leg dorsum of foot and abrasion back. Died in hospital on 26th January.
Stuff cooly ...	Do ...	Do	Do ...	Fracture of skull, nose torn, penetrating wound of lower 3rd of left leg and multiple injuries all over the body.
Timber cooly ...	Do ...	Do	Do ...	Fracture of left fibula and wound of left knee, ankle and scalp.
Handjumper cooly	Stope below the 68th level N., Oakley's Section.	Do	Do ...	Fracture of skull and penetrating wound of left knee.
Contractor (M. 46)	Drive, 67th level N., Oakley's No. 2 Vertical Shaft.	Do	Do ...	Fracture of skull, brain exposed.
Timber cooly ...	Do ...		Do ...	Right leg completely crushed and multiple injuries all over the body.
Do ..	Drive, 70th level N., Auxiliary Shaft.	Do	Do ...	Right thigh fractured, wound of left cheek and multiple injuries all over the body.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
23rd January—(*contd.*)	14	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District.—*contd.*				M. Kullappa ...	35
						O. Abboyee ...	40
						V. Poongan ...	35
						K. Annappan ...	30
						V. Chowry ...	35
						and	
						V. Murugan ...	40
18th February ...	30	Do ...	9-30	$2\frac{1}{2}$	..	1 V. Muniswami ...	27
24th February ...	26	Do ...	13	6	...	1 P. Muniswami ...	25
26th February ...	27	Do ...	9-45	$2\frac{3}{4}$	1 G. Muniswami ...	...	30
4th March ...	40	Do ...	1-54	$2^{9}/_{10}$	2 M. Kunjalavi ...	...	28
					and		
					M. Kunjali ...	...	45
14th March ...	37	Do ...	8-24	$1\frac{2}{5}$	...	1 N. Velan *alias* Velayudam.	35

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931—*Continued.* Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Handjumper cooly	Stope below the 67th level N., Oakley's No. 2 Vertical Shaft.	XI	A very heavy rockburst ...	Left knee joint opened and wound of right arm.
Do ...	Do ...	Do	Do ...	Punctured wound of left thigh and knee joint opened.
Timber cooly ...	Drive, 68th level S., Bullen's Incline Shaft.	Do	Do ...	Lacerated wound of right knee, joint opened.
Granite wall cooly	Drive, 67th level S., Bullen's Incline Shaft.	Do	Do ..	Left thigh crushed and amputated, wound of left forearm and right hand.
imber cooly ...	Drive, 68th level N., Auxiliary Shaft.	Do	Do ...	Contusion right side of forehead, deep wound of scalp, wounds of right shoulder back, fore arm, both knees and legs.
Assistant Foreman (M. 1,392—B. 4,253.)	Drive, 63rd level N., Oakley's No. 2 Vertical Shaft.	Do	Do ...	Fracture of pelvis, small wounds of left hand, left foot and right leg.
Handjumper cooly	Stope below the 68th level N., Bullen's Incline Shaft.	XV	While taking down loose a piece of rock fell on his leg.	Three days old wound lower 3rd of right leg, tendo-achilles slightly cut.
Handjumper cooly	Stope below the 58th level N., Oakley's No. 2 Vertical Shaft.	XIII	Through drilling into a socket containing remnant of a charge of blasting gelatine.	Peppered wounds of face, both hands, chest and legs. Foreign bodies in both eyes, right eye burst.
Timber cooly ...	Drive, 53rd level N., Bullen's Incline Shaft.	XV	Owing to the cutting of the life line by a fall of rock, he fell into a stope 30 feet below.	Fracture of base of skull and multiple injuries all over the body.
Blaster. (M. 11915—B. 8094).	Drive, 69th level N, Bullen's Incline Shaft.	XI	A very heavy rockburst ...	Multiple injuries to head and body. Recovered at 7-30 A.M. on 17th March.
Assistant blaster	Do ...	Do	Do	Multiple injuries to head and body. Recovered at 6 A.M. on 17th March.
Stuff mestri, (M. 13,132).	Drive, 54th level S., Bullen's Incline Shaft.	XI	A rockburst	Wound lower third of both legs, left tendo-achilles completely cut and right tendo-achilles injured.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed *(All males unless otherwise stated)*	Names and Number of Persons injured *(All males unless otherwise stated)*	Reputed Age
17th March ...	41	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	20	5	...	1 G. Muniswami ...	40
30th March ...	49	Do ...	19-14	$4\frac{1}{4}$	...	1 A. Kuppan ...	20
28th April ...	64	Do ...	10-5	$3\frac{5}{6}$	...	2 P. Singaram ... and	25
						M Krishna Nair...	50
3rd May ...	67	Do ...	12	5	...	1 K. Jayaram ...	20
16th May ...	75	Do ...	10	3	...	1 M. Duraiswami	21
17th May ...	77	Do ...	13-23	6	...	1 T. Munian ...	45
2nd June ...	83	Do ...	10-20	$3\frac{1}{3}$	1 A. Maury ...	...	45
4th June ...	85	Do ...	11	4	...	1 Veeran Kutty ...	20
5th June ...	88	Do ...	11-55	$4^{11}/_{12}$	1 P. Doddappa *alias* Dadigadoo.	...	38
10th June ...	92	Do ...	2	3	...	1 B. Lazar ...	45
15th June ...	95	Do ...	10-55	$3^{11}/_{12}$	...	1 K. Rajarathnam	22

Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Machine mestri, (M. 1,261).	No. 5 winze below the 73rd level N., Auxiliary Shaft.	XI	A rockburst	Wound lower third of right leg, tendo-achilles completely cut.
Stuff cooly ...	Plat, 52nd level, Oakley's Incline Shaft.	XIX	A stone rolled down a pile and struck his leg.	Wound of lower third of left leg, tendo-achilles cut.
Machine cooly ...	Sink, 70 feet below the 74th level, Auxiliary Shaft.	XI	A rockburst	Wound of left knee, joint opened and abrasion dorsum of left foot and right inner ankle.
Do ...	Do ...	Do	Do	Wound behind left ankle, tendo-achilles cut, and fracture of oscalcis
Timber cooly ...	Drive, 68th level N., Auxiliary Shaft.	XIX	While fixing a set, a piece of rock fell on his knee.	Wound of right knee, joint opened.
Timber cooly ...	Drive, 65th level S., Oakley's No. 2 Vertical Shaft.	XIX	While breaking a big piece of rock, a chip flew into his eye.	Contusion of right eye with haemorrhage into the anterior chamber.
Stuff cooly ...	Drive, 73rd level S., Bullen's Incline Shaft.	XVII	A wheel of a loaded bandy passed over his foot.	Extensive lacerated wound of dorsum and sole of right foot with compound fracture of last two metatarsals.
Handjumper cooly	No. 34 stope below the 54th level S., Oakley's No. 2 Vertical Shaft,	XI	A rockburst	Compound fracture of right thigh and injuries to head and body.
Handjumper cooly	No. 56 stope below the 56th level N., Bullen's Incline Shaft.	XI	A rockburst	Wound middle of left forearm, middle of left thigh, muscles cut, wounds of scalp, forehead and right knee.
Handjumper mestri,(M.10,384 —B. 7,167).	No. 25 stope below the 65th level N., Bullen's Incline Shaft.	XI	A rockburst	Fracture of skull and injuries to both legs.
Bellman ...	Plat, 52nd level, Oakley's No. 2 Vertical Shaft.	XIX	He slipped and fell from a step in the plat.	Simple fracture of both bones of lower third of left forearm.
Blackrock cooly	Drive, 70th level S., Bullen's Incline Shaft.	XIX	While fixing a timber, a stone fell on his arm from above.	Lacerated wound middle of left forearm, muscles injured.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
7th July ...	98	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	10-45	$3\frac{3}{4}$	...	2 K. Chinnaswami and	45
						M. Ramaswami ...	35
27th July ...	109	Do ...	11-30	$4\frac{1}{2}$	...	1 T. Natesan ...	22
30th July ...	107	Do ...	15-55	8	7 M. Abdulla ...	...	35
					T. Avaran Kutty ...	...	40
					K. Kunjayamutty	...	40
					T. Ali ...	...	32
					P. Athen Kutty ...	...	28
					A. Mammi ... and	...	30
					A. Kunjayamoo ...	...	24
1st August ...	108	Do ..	21-44	$6^{11}/_{15}$	1 T. Abboo ...	...	60

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Natue of Injury
Hand jumper cooly	No. 32 stope below the 67th level N., Oakley's No. 2 Vertical Shaft.	XIII	Through deepening a socket containing a small quantity of unexploded explosives.	Foreign bodies in both eyes; peppered wounds of face with compound fracture of right malar bone, peppered wounds of chest wall, both forearms and legs.
Handjumper cooly	Do ...	XIII	Do	Peppered wounds of face, foreign bodies in both eyes, penetrating wound of right eye with prolapse of iris, peppered wounds of chest-wall, both forearms and legs.
Stufl cooly ...	Drive, 50th level N., Bullen's Incline Shaft.	XVII	While pushing a loaded bandy, a piece of quartz rolled down and struck his hands.	Compound fracture of 1st phalanx of left middle finger and wound of right middle finger.
Handjumper mestri, (M. 13,502).	Stope below the 68th level S., Bullen's Incline Shaft.	XI	A rockburst	Multiple injuries to head, body and limbs.
Handjumper cooly	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Do ..	Do ...	Do	Do	Do
Bellman ...	Plat, 58th level, Oakley's No. 2 Vertical Shaft.	VI	While he was in the act of getting into the cage, it was suddenly lowered with the result he was caught between the cage and the plat timbers.	Wounds of scalp, right foot, lower 3rd of right leg and both knees with internal injuries.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
4th August ...	111	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	10-45	3¾	...	1 O. Maury ...	45
5th August ...	114	Do ...	16	9	...	1 Guruswami ...	13
8th August ...	115	Do ...	15-40	⅔	1 V. Kali ...	...	40
19th September...	138	Do ..	8	1	...	1 V. Raman Kutty	28
21st September...	130	Do ...	12-45	5¾	...	1 V. Masilamony...	28
28th September...	134	Do ...	10-45	3¾	1 K. Mammoo ...	...	40
4th October ...	139	Do ..	11-30	4½	...	1 M. Chinnian ...	32
7th October ...	142	Do ...	10-20	3⅓	...	1 V. Krishna Reddy	33
8th October ...	143	Do ...	15-15	8⅓	...	1 K. Darman ...	30
14th October ...	152	Do ...	14-30	7½	...	1 O. Raman ...	50

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.—*Continued* Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Handjumper cooly	Stope above the 70th level S., Bullen's Incline Shaft.	XI	A rockburst	Extensive lacerated wound of lower 3rd of left arm, muscles cut, wound of left side of neck with compound fracture of clavicle, wounds of scalp and small wounds all over the body.
Cleaner ...	Near No. 1 Cyanide Works (surface)	XXIII	While getting down a flight of steps he slipped and fell.	One day old green-stick fracture of left ulna.
Machine mestri, (M. 13,021—B. 8,641).	73rd level S., Auxiliary Shaft.	XV	While opening the door of the bucket-road, he slipped and fell down the winze about 150 feet.	Fracture of skull and multiple injuries all over the body.
Handjumper mestri, (M. 12,618—B. 8,415).	No. 18 stope above the 55th level S., Oakley's No. 2 Vertical Shaft.	XIX	While barring down loose, a piece of rock fell on his foot.	Four days old wound of dorsum of left foot with cellulitis of foot.
Handjumper cooly	Stope below the 69th level S., Bullen's Incline Shaft.	XI	A burst of rock	Wound of lower third of left leg, tendo-achilles completely cut and wound of dorsum of left hand.
Handjumper Foreman, (M. 6854—B. 4806).	No. 18 stope above the 55th level S., Oakleys' No. 2 Vertical Shaft.	XV	While working on a stage, he over-balanced and fell down.	Penetrating wound of right side of abdominal wall leading to the liver, lacerated wound of both knees, left inner ankle and nose and wound of both lips and elbow. Died in hospital at 12 midnight on 22nd November, "Septicæmia" having supervened.
Stuff cooly ...	Drive, 64th level N., Oakley's No. 2 Vertical Shaft.	XI	A burst of rock	Compound fracture of right great and 2nd toes, wound of scalp, middle of left fore-arm and left knee.
Machine cooly ...	No. 31 stope below the 66th level S., Taylor's Section.	XV	While cleaning stuff, a piece of rock fell on him from above.	Lacerated wound lower 3rd of left leg, tendo-achilles partly cut.
Barring cooly ...	Bottom of 1st Section of Dump Haulage Line (surface).	XXII	While walking along the tramline, he was knocked down and run over by a moving bandy.	Extensive lacerated wound whole of right leg, muscles injured.
Handjumper cooly	No. 9 stope below the 57th level, N., Oakley's No. 2 Vertical Shaft.	XIX	While drilling, a sharp piece of steel from the jumper struck his arm.	Three day's old wound of left arm, with cellulitis of arm.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
29th October ...	161	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	9-21	$2^{7}/_{20}$	3 B. Anthoo ...	...	25
					V. Muniswami ...	...	33
					and S Muniswami ...	...	35
29th October ...	162	Do ...	9-21	$2^{7}/_{20}$	...	1 A. Periapian ...	35
4th November ...	166	Do ...	10-30	3½	..	1 L. Anthony ...	37
4th November ...	167	Do ...	11	4	...	1 M. Chinnian ...	30
4th November ...	168	Do ...	11	4	...	1 V. Muniswami ...	30
8th November ...	172	Do ...	18-30	3½	...	1 Madalaimuthoo...	35
13th November ..	174	Do ...	11-30	4½	...	2 T. Chinnakannoo	35
						and	
					...	C. Muniswami ...	40
18th November...	180	Do ...	7-10	8⅓	...	1 Krishna Nair ...	20

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Timber cooly ...	Drive, 55th level N., Oakley's No. 2 Vertical Shaft.	XI	A rockburst	Crushed by falling rocks.
Do ...	Do ...	Do	Do	Do
Do ..	Do ...	Do	Do	Crushed by falling rocks. Died on the way to Hospital.
Handjumper cooly	No. 18 stope below 61st level N., Oakley's No. 2 Vertical Shaft.	XI	A rockburst	Lacerated wound middle of left arm, biceps cut, lacerated wound of left knee, joint opened, lower condyles of femur cut off.
Timber cooly ...	Drive, 57th level N., Bullen's Incline Shaft.	XIX	While breaking a large slab of rock, a piece struck his foot.	Lacerated wound dorsum of right foot, tendons injured.
Handjumper cooly	Stope below the 64th level S., Oakley's No. 2 Vertical Shaft.	XIX	While clearing stuff, a piece of quartz fell on his leg.	Wound of left leg, tendo-achilles partly cut.
Timber mestri, (M. 13,269—B. 8,750.)	Stope below the 58th level S., Bullen's Incline Shaft.	XV	While fixing a pigstye, a piece of rock fell on his hand.	Lacerated wound of right hand, last metacarpal and finger crushed and amputated.
Cotterman ...	Crosscut E., 75th level Auxiliary Shaft.	XIX	While drilling, a piece of rock fell on his leg.	Extensive lacerated wound lower 3rd of left leg, muscles injured and tendo-achilles completely cut.
Handjumper mestri, (M. 12,430.)	Stope below the 69th level N., Auxiliary Shaft.	XIII	Through drilling into or intersecting a socket containing portion of a charge of blasting gelatine.	Peppered wounds of forehead, scalp and left forearm. Foreign bodies in both eyes. Lacerated wound of left knee, joint opened, quadriceps femoris cut.
Handjumper cooly	Do ...	Do	Do	Lacerated wound upper 3rd of left thigh and middle of leg, muscles cut.
Blaster's assistant	No. 2 winze below the 73rd level N., Auxiliary Shaft.	VI	While riding up on the bow of the bucket, he struck against the sides of the winze.	Contused abrasion of upper part of back, left shoulder, behind left knee and ecchymosis of left eye.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
14th December ...	191	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	10-35	3½	...	1 S. Nayagam ...	22
15th December ...	189	Do ...	2-30	3½	...	1 K. Syed Ali ...	36
22nd December ...	195	Do (*concld.*)	10	3	...	1 D. Anthony ...	21
14th January ...	9	The Nundydroog Gold Mine, Bowringpet Taluk, Kolar District.	18-15	3	...	1 G. Velayutham ...	50
17th January ...	13	Do ...	17	9	...	1 S. Yellan ...	17
29th January ...	17	Do ...	14	7	...	1 V. Velan ...	34
4th February ...	20	Do ...	15-30	7½	...	1 V. Muniswami ...	45
22nd February ...	22	Do ...	13	6	...	1 P. Govindaraj *alias* Govindaswami.	36
27th February ...	33	Do ...	7-30	...	...	1 E. Kunjahamed...	30
27th February ...	28	Do ...	9-10	2	...	1 S. Sanjeevi ...	22
27th February ...	29	Do ...	10	3	...	1 P Kunjammoo ...	26
3rd March ...	32	Do ...	11	4	...	1 B. Samuel ...	19

Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Timber cooly ...	Drive, 56th level N., Oakley's No. 2 Vertical Shaft.	XIX	While ladders were being taken out of a stope above, a piece of rock rolled down and struck his leg.	Wound of lower 3rd of right leg with compound fracture of fibula.
Blaster, (M. 11,032—B. 7,494).	No. 16 stope below the 62nd level S., Oakley's No. 2 Vertical Shaft.	XIX	While charging a hole, a piece of rock fell on his leg.	Wounds of lower 3rd of right leg, tendo-achilles cut.
Timber cooly ...	Drive, 67th level N., Bullen's Incline Shaft.	XIX	While carrying casuarina poles in the drive, he tripped against a sleeper and fell.	Simple fracture of right clavicle.
Staff mestri, (M. 6,225—B. 4,302)	Chute, 1,700 ft. level S., Richards' Shaft.	XIX	While filling a bandy at a flat chute, he slipped and fell astride a plank.	Rupture of urethra.
Pebble cooly ...	Quartz Yard, New Picking Floor (surface).	XXIII	While carrying a basket of pebbles, one of them fell on his shoulder.	Fracture of left clavicle
Cotterman ...	Drive, 53rd level N., No. 3 Winze, Oriental Section.	XIX	While tightening the machine bar, a stone from the back fell on his foot.	Contused wound of front of left ankle and old wound instep of foot.
Black-smith ...	Blacksmith's shop (surface).	XXIII	While cutting a red hot iron, a spark flew into his eye.	Corneal ulcer with opacity and pterygium of left eye.
Machine mestri, (M. 11,219—B. 7,619).	Sink, 110 feet below the 48th level No. 1 winze N., Taylor's Main Winze.	XV	A casuarina pole from a derailed trolley fell down the winze and struck him on the shoulder.	Contused abrasion of right shoulder and back and fracture of right clavicle.
Handjumper cooly	Stope below the 23rd level S., Richards' Incline Shaft.	XV	While climbing down by ladder, a piece of rock fell on his hand.	Lacerated wounds of right last 4 fingers, wound dorsum of hand with fracture of 1st phalanges of 3rd and 4th fingers.
Timber cooly ...	Drive, 49th level (Intermediate) N., Oriental Section.	XIX	While unloading granite stones from a trolley, one of them fell on his foot.	Right 2nd, 3rd and 4th toes crushed and amputated.
Handjumper cooly	Stope below the 43rd level N., Taylor's Shaft	XV	While cleaning stuff at the point of the stope, a piece of rock falling from above struck his leg.	Wound of lower 3rd of left leg, tendo-achilles completely cut.
Joburg Machine-man.	Drive, 51st level S., Taylor's Section.	XV	While working on a stage a portion of it collapsed and threw him into the level below.	Fractures of left 3rd, 4th, 5th and 6th ribs and wounds of left hand and elbow.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
9th April ...	53	The Nundydroog Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	8-45	1¾	...	1 M. Chinnaswami	28
10th April ...	54	Do ...	2	3	...	1 S. Govindaswami	22
14th April ...	56	Do ...	8	1	...	1 Madurai ...	22
21st April ...	60	Do ...	4-15	5	...	4 G. Kuppan ...	40
						G. Munian ...	43
						K. Periaswami ...	35
						and	
						G. Ramaswami ...	33
24th May ...	81	Do ...	16	3	53 P. Sankaran Nair.	...	42
					K. Raman Nair...	...	28
					M. Gopal Nair ...	...	45
					D. Maury ...	...	42
					N. Arthanary ...	...	36
					M. Muniswami ...	...	32
					E. Chinnappan ...	...	22
					S. Manickam ...	...	19

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931—*Continued.* Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Bar cooly ...	Crosscut E., 57th level, No. 1 Auxiliary Shaft.	XI	A rockburst.	Wound of right knee, joint opened and wound of middle of right forearm and upper 3rd of left thigh (cut) and contusion of middle of back.
Blaster's assistant	Stope below 2,750 ft. level S. Richard's Incline Shaft.	XV	While charging holes in the stope, a piece of rock fell on him from above.	Punctured wound of left knee, joint opened and wound dorsum of foot.
Gang cooly ...	Slimes Plant (surface).	XXIII	While carrying a pipe along a narrow passage, he overbalanced and fell into a drain and the pipe fell on him.	Fracture of right 7th rib and dislocation of right hip.
Cage-road cooly...	Cage at 44th level plat, Henry Shaft.	VI	As a result of the impact caused by the bumping of the cage on the keps, the men inside were injured.	Fracture middle of right thigh and Pott's fracture.
Do ...	Do ...	Do	Do	Contused swelling middle of back. Fracture of spine.
Detective, Watch Establishment.	Do ...	Do	Do	Contusted swelling middle of back. Fracture of spine.
Do ...	Do ...	Do	Do	Fracture of external condyle of right femur and lacerated wound of right inner ankle, joint opened and fracture of oscalcis.
Machine mestri (M. 9,057—B. 65,66).	No. 10 stope below the 40th level S., Oriental Main Winze.	XII	A fire underground	Asphyxiated by smoke
Machine cooly ..	Do ...	Do	Do	Do
Machine mestri (M. 7,817—B. 5,600).	Do ...	Do	Do	Do
Machine mestri (M. 9,307).	Do ...	Do	Do	Do
Machine mestri (M. 10,875—B. 7,403).	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
24th May (*contd.*) ..	81	The Nundydroog Gold Mine, Bowringpet Taluk, Kolar District —*contd.*			B. Kuppuswami ...	...	55
					D. Subbarayan ...	...	36
					T. Chinnarayappan.	...	34
					T. Chinnappan ...	...	33
					M. Raghava Panicker.	..	36
					K. Kunju Eluthachan.	...	48
					S. Narayanaswami.	...	30
					M. Iyaswami ...	...	27
					S. Armugam ...	...	26
					S. Ponnuswami ..	..	33
					T. Chinnapian ...	...	38
					P Rungan ...	...	24
					K. Moidoo ...	...	43
					K. Mohamed ...	...	19
					J. Chamundy ...	...	47
					P. Amaravathi Goundan.	...	42
					P. Subbiah ...	...	37
					Kuttiah Goundan.	...	45
					K. P. Chinnappan.	...	38
					G. Perumal ...	...	36
					M. Lutchmanan ...	...	20
					A. Gangan ...	...	46
					N. Venkataswami.	..	45
					M. Muniswami ...	...	28

OF MYSORE DURING THE YEAR 1931.—*Continued* **Table 13**—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Machine mestri...	No. 10 stope below the 40th level S., Oriental Main Winze.	XII	A fire underground	Asphyxiated by smoke
Machine mestri (M. 13,475—B. 8 826).	Do ...	Do	Do	Do
Machine mestri (M. 13,470).	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Machine mestri.	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Machine mestri (M. 12,291— B, 8,299).	Do ...	Do	Do	Do
Machine cooly	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Blaster (M. 4,955 —B. 3,131).	Do ...	Do	Do	Do
Blaster's assistant.	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Do
Machine mestri (M. 13,309—B. 8,770).	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Do
Do ...	Do ..	Do	Do	Died in Hospital on 27th May.
Machine mestri (M. 11,793—B. 8,027).	Do ...	Do	Do	Asphyxiated by smoke.
Machine mestri	Do ...	Do	Do ...	Do
Machine cooly ...	Do ..	Do	Do	Do
Ringer ...	Do ...	Do	Do	Do
Stuff cooly ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
24th May ... (*contd.*)	81	The Nundydroog Gold Mine, Bowringpet Taluk, Kolar District—*contd.*	...	...	V. Buddan ...	...	50
					Parthasarathy ...	...	52
					E. Krishnaswami.	...	54
					J. M. Peters ...	...	43
					K. Joseph ...	...	28
					O. Guruvadoo ...	...	27
					C. Jacob ...	...	33
					C. Nagan ...	...	51
					V. Padavattan ...	...	46
					J. Kadapian ..	...	52
					Govindan ...	...	28
					Rajagopal ...	...	26
					Lutchman Singh ...	...	58
					K. Rangaswami ...	...	40
					V. Arunachallam ...	...	30
					K. Duraiswami ...	...	25
					P Thulkanam .	...	22
					V. Marimuthu ...	...	45
					K. Chinnappan ...	...	50
					G. Venkataswami.	...	25
					C. Narayanaswami.	...	...
						6. V. Narayanan Nair.	28
						C. Ramaswami ...	26

OF MYSORE DURING THE YEAR 1931.—*Continued* **Table 13**—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Natue of Injury
Ringer ...	No. 10 stope below the 40th level S., Oriental Main Winze.	XII	A fire underground ...	Asphyxiated by smoke
Do ...	Do ...	Do	Do	Do
Door boy ..	Do ...	Do	Do	Do
Head Turner ...	Do ...	Do	Do	Do
Stuff cooly ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Door boy ...	Do ...	Do	Do	Do
Winding driver ...	Do ...	Do	Do	Do
Door boy ...	Do ...	Do	Do	Do
Winding driver ...	Do ...	Do	Do	Do
Stuff cooly ...	Do ...	Do	Do	Do
Ringer ...	Do ...	Do	Do	Do
Winding driver ...	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Died in hospital on 26th May.
Stuff cooly ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Do
Machine mestri (M. 9,036—B. 6,554).	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Died in hospital on 25th May.
Do ...	Do ...	Do	Do	Do
Do ...	Do ...	Do	Do	Developed pneumonia and tuberculosis of lungs on 18th June. Died in hospital on 10th July.
Do ...	Do ...	Do	Do	Inhalation of smoke underground. Developed pneumonia on 27th May.
Do ...	Do ...	Do	Do	Do

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
24th May—*contd.*	81	The Nundydroog Gold Mine, Bowringpet Taluk, Kolar District—*contd.*				D. Nayagam ...	39
						V. Abdul Razack ...	31
						D. Ettiyan ..	45
						and	
						K. Gopalan Nair ...	35
25th July ..	104	Do ...	11-30	4½	1 K. Rajagopal ... *alias* Kullan	...	38
8th August ...	116	Do ...	10	3	...	1 S. Murugan ...	45
11th August ...	120	Do ...	18-30	3½	...	1 O. Karichi Gowndan.	55
14th August ...	119	Do ...	10-15	3¼	...	1 S. Rangaswami... *alias* Aligiriswami Pillai	52
30th August ...	124	Do ...	13-30	6½	...	1 K. Dhanapal ...	24
1st September ..	125	Do ...	13-30	6½	...	1 J. Pulliappan ...	27

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.—*Continued*

Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Natue of Injury
Machine mestri (M. 2,828).	No. 10 stope below the 40th level S., Oriental Main Winze.	XII	A fire underground	Inhalation of smoke underground. Now developed pneumonia 27th May.
Machine cooly ...	Do ..	Do	Do	Inhalation of smoke underground. Now developed pneumonia 28th May.
Stuff mestri ...	Do ...	Do	Do	Do
Machine cooly ...	Do ...	Do	Do	Do
Timber mestri, (M. 8,980—B. 6,519).	Drive, 2,000 ft. level N., Richards' Incline Shaft.	XI	A rockburst	Wounds of scalp and face with concussion of brain, right elbow joint opened and bone chipped, compound fracture of both bones of lower 3rd of right forearm, simple fracture of both bones lower 3rd of left forearm. Died in hospital on 18th October at 3-5 A.M. Septicaemia having supervened.
Fitter's assistant	48th level, Transfer Station, Henry Shaft.	XVIII	A chain block slipped and fell on his foot.	Right 3rd and 4th toes with 3rd metatarsal crushed and amputated. Lacerated wound dorsum of foot with Potts' fracture.
Handjumper cooly	Drive, 2,450 ft. level N., Richards' Incline Shaft.	XIX	While walking along the level, some piece of rock from the hanging wall fell on him.	Wound of scalp, contused wounds of back, wounds of right wrist, left 3rd and 4th toes.
Machine mestri, (M. 2,530—B. 2,663).	Stope N. 27 above the 54th level N., Oriental Section.	I	Collapse of the stage due to fall of a portion of hanging wall.	Rupture of urethra.
Timber cooly ...	Stope above the 54th level S., No. 2 Auxiliary Shaft.	XI	A burst of quartz	Fracture of left clavicle and wounds of neck, left eyebrow, face and left knee.
Cotterman ...	N. 27 stope above the 54th level N., No. 1 Auxiliary Shaft. (Oriental Section).	XIX	While barring down loose, a small piece of quartz flew into his eye.	Penetrating wound of right eye (blinded).

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed *(All males unless otherwise stated)*	Names and Number of Persons injured *(All males unless otherwise stated)*	Reputed Age
7th September ...	127	The Nundydroog Gold Mine, Bowringpet Taluk, Kolar District.—*contd.*	13	6	...	1 S. Chennappah...	40
15th September...	128	Do ...	1-45	2¾	...	1 Jayanathan ...	25
24th September...	136	Do ...	16	3	...	1 K. Muniswami ...	23
28th September...	137	Do ...	18	3	...	1 A. Syed Ameer...	40
6th October ...	141	Do ...	17	2	...	1 O. Kuppan ...	38
7th October ...	144	Do ...	12	5	...	1 K. Muniswami...	25
10th October ...	145	Do ...	12-15	5¼	2 V. Pungi ... and M. Kutti Chettiar...	...	35 38
18th October ...	148	Do ...	9-45	2¾	...	1 B. Chinnapian...	35

OF MYSORE DURING THE YEAR 1931.—*Continued* **Table 13**—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Timber mestri, (M. 5,463).	Stope above the 51st level N., Oriental section.	XV	While fixing a timber, a piece of quartz fell on his leg.	Wound dorsum of left foot with compound fracture of 4th and 5th metatarsals and contused abrasion of lower 3rd of leg.
Platman ...	Plat, 44th level, Henry Shaft.	XIX	While resting in the plat close to the shaft his legs were struck by a descending cage.	Left leg and foot crushed and contused wounds of right foot. Amputated at the site of election.
Gang cooly ...	Tube Mill yard near residue dump (surface.)	XXIII	While carrying a pipe, a piece of iron plate struck his leg.	Two days old septic wound middle of right leg with cellulitis.
Cotterman ...	No. 4 winze, 54th level N., Oriental Section.	XI	A rockburst	Wound of left knee, joint opened and wound dorsum of right great toe.
Timber cooly ...	Drive, 38th level N., Kennedy's Shaft.	XIX	While clearing stuff in the level, a piece of rock fell on him.	Lacerated wound of right knee, joint opened and wound of middle 3rd of left leg.
Machine cooly ...	Top of No. 1 winze, 53rd level N., Taylor's Section.	XVIII	His hand was caught between the hoisting rope and pulley wheel.	Lacerated wound of both sides of left hand and all the fingers. Fracture of distal phalanx of left thumb and fracture of middle and ring metacarpals.
Handjumper cooly	S. 15 stope below the 26th level, Richards' Shaft.	XI	A rockburst	Multiple injuries to head and body.
Do ...	Do ...	Do	Do	Lacerated wound middle 3rd of left thigh, muscles cut and wounds of both lips and abdominal wall, wound of left eyebrow, inner ankle and right shoulder. Wounds all over the body. Died in hospital at 7-50 P M. on 16th October.
Timber mestri, (M. 8,961).	N. 24 stope below the 45th level, Oriental Section.	XIX	While barring down loose a piece of rock fell on his leg.	Crushed right foot and lower part of right leg (amputated).

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
20th October ...	154	The Nundydroog Gold Mine, Bowringpet Taluk, Kolar District.—*contd.*	13	6	...	1 A. Kunjalam ...	28
22nd October ...	153	Do ...	22	7	...	1 D. Manickam ...	34
23rd October ...	158	Do ...	17-30	2½	...	1 Iyakannoo ...	38
4th November ...	169	Do ...	10-20	3⅓	...	1 J. Chinnakolanday	42
8th November ...	171	Do ...	7-48	⅔	...	1 B. Dasappah ...	48
11th November...	173	Do ...	10-20	3¾	...	1 K. Chinnappan... *alias* Chinnian ...	40
10th December ...	187	Do ...	14-30	7½	...	1 Venkatesh ...	13
21st December ...	194	Do ...	19	4	...	1 K. Krishnaswami	35
24th December ...	197	Do (*concld*) ...	13	6	...	1 N. Ahmed Kutty	35
2nd January ...	2	The Balaghat Gold Mine, Bowringpet Taluk, Kolar District.	3	4	...	1 Shaik Nabbi ...	18
7th January ...	5	Do ...	13	6	...	1 Devapriyam ...	30

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Handjumper cooly	Stope below the 43rd level S., Taylor's Section.	XIX	While starting a hole, a chip of quartz flew into his eye.	Corneal ulcer of right eye due to one day old wound.
Stuff cooly ...	No. 29 stope above the 54th level, Oriental Section.	XI	A burst of quartz ...	Extensive lacerated wound dorsum of left hand with compound fracture of 2 metacarpals, wounds of both legs and both arms.
Timber mestri, (M. 10,333).	Drive, 51st level N., No. 2 Auxiliary Shaft.	XVII	While pulling a bandy from the front, a wheel passed over his foot.	Wound sole of right third and fourth toes, nails off, fracture of fourth toe and fifth metatarsal.
Timber cooly ...	Drive, 51st level N., Taylor's Section.	XVII	He was caught between a moving truck and a side of the level.	Simple fracture of middle of right humerus and contusion of upper third of left thigh.
Handjumper mestri, (M. 8,805—B. 6,398).	Stope below the 50th level N., Kennedy's Main Winze.	XI	A rockburst	Left forearm crushed and amputated, extensive lacerated wound of left foot, first 4 toes crushed and wound of knee.
Machine mestri, (M. 11,276—B. 7,663).	No. 5 winze, 54th level N., Oriental Section.	XI	A rockburst	Compound depressed fracture of skull, a little brain matter escaped and wound lower part of back.
Bull driver ...	Tramline, Sonnakuppam Tank (surface)	XXII	While driving a loaded bandy his leg slipped and a wheel passed over his foot.	Right 1st four toes crushed and 1st three amputated.
Machine mestri (M. 13,584—B. 8,868).	Crosscut E., 51st level N., Kennedy's Section.	XI	A burst of rock	Wound of right knee, joint opened.
Handjumper cooly	Stope below the 52nd level N., Taylor's Section.	XI	A burst of rock	Lacerated wound of lower third of left leg, tendo-achilles cut.
Stuff cooly ...	Drive, 45th level S., Tennants' Main Winze.	XVII	While putting a derailed bandy on the track, his foot was caught under a wheel.	Extensive lacerated wound of sole of left foot.
Blaster, (M. 11,811—B. 8,041).	Sink, 140 feet below the 51st level, No. 1 Deep Level Main Winze.	X	While at work in the sink he was struck by a hammer that fell from part way down the shaft.	Contused swelling left side of back with internal injury to lungs and fracture of 8th and 9th ribs.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
1st February ...	16	The Balaghat Gold Mine, Bowringpet Taluk. Kolar District—*contd.*	14	7	...	1 Aseervatham ...	26
8th April ...	52	Do ...	10	3	...	1 K. Authigadoo ..	27
13th April ...	55	Do ...	10-30	3½	...	1 Ramaswami ...	20
12th May ...	71	Do ...	14	7	...	1 Kali ...	30
14th May ...	74	Do ...	20-45	5¾	...	1 C. Jeggan ...	50
17th May ...	76	Do ...	20-45	5¾	..	1 Powle ...	20
12th June ...	91	Do ...	4-30	5½	...	2 C. Jamboo	48
						and	
						Subban ...	22
8th July ...	103	Do ...	11	4	...	1 Anthony ...	25
24th September...	132	Do ...	13	6	...	1 M. Sikhamani ...	22

Table 13—*Continued.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
Fitter boy ...	Drive, 40th level N., No. 2 winze, Ogle's Section.	XIX	While walking along the drive, he tripped and fell.	Wound of left knee, joint opened.
Machine mestri, (M. 13,088—B. 8,666).	No. 2 rise, 51st level N., Deep Level Main Winze.	XV	While barring down loose, a stone fell on his foot.	Wound dorsum of right foot, fractures of last phalanx, 1st toe and 2nd metatarsal.
Bell fitter ...	North skip road, 55th level plat, No. 3 Winze South.	VI	While riding up in the skip, his hand was caught between it and the plat timber.	Wounds of right elbow, joint opened and bones crushed.
Handjumper cooly	No. 3 stope below the 46th level S., Taylor's Section.	XI	A burst of quartz	Wound of right knee, joint opened and deep wound of upper third of right arm.
Timber mestri, (M. 11,690).	No. 3 stope below the 47th level S., Tennants' Section.	XI	A burst of quartz	Wound of left knee, joint opened.
Tramming cooly	Drive, 45th level N., Deep Level Main Winze.	XVII	A wheel of a loaded bandy passed over his foot.	Extensive lacerated wound of sole of right foot and fracture of proximal phalanx of great toe.
Machine mestri, (M. 5,773—B. 3,800).	Sink, 20 feet below the 53rd level, Deep Level Main Winze.	XI	A rockburst	Lacerated wound of lower 3rd of left thigh, dorsum of foot, abrasion of leg, wound of right knee lower 3rd of leg and dorsum of 5th toe, wound of right eye brow and forehead (left knee already stiff)
Stuff cooly ...	Do ...	Do	Do	Wounds of forehead, right upper eyelid, lip and chin, compound fracture both bones lower 3rd of right leg.
Timber cooly ...	Drive, 48th level S., No. 3 winze, Tennants' Section.	XIX	While cutting a hitch, a chip of rock flew into his eye.	Corneal ulcer of right eye due to two days old injury.
Stuff cooly ...	No. 3 stope, below the 48th level S., Tennants' Section.	XI	A rockburst	Wound of right knee, joint opened and wound of upper lip.

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
21st October ...	150	The Balaghat Gold Mine, Bowringpet Taluk, Kolar District *contd.*	22-50	$7\frac{5}{6}$	1 Nizam Moideen	...	30
Do ...	157	Do ...	22-40	$7\frac{2}{3}$	...	1 M. Perumal Pillay	50
27th October ...	156	Do ...	11-58	$4^{29}/_{30}$	...	1 M. Arjunan ...	30
28th October ...	159	Do ...	20-30	$5\frac{1}{2}$	...	1 C. Narayan ...	24
3rd December ...	183	Do ...	13	6	...	1 Samoo ...	40
10th December ...	185	Do (*concld*)...	11-45	$4\frac{3}{4}$	1 Appoo ...	...	33
						1 Chamy ...	35

AND SERIOUS ACCIDENTS

OF MYSORE DURING THE YEAR 1931.—*Concluded*

Table 13—*Concluded.*

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Natue of Injury
Bellman (M. 12,928).	Plat, 53rd level, Deep Level Main Winze.	VIII	While getting out of the bucket, he lost his hold and fell into the sink—a distance of 70 feet.	Simple fracture of middle 3rd of left thigh. Fracture of the anatomical neck of humerus, both elbows and right forearm and abrasion both legs. Died in hospital at 3-20 A.M. on 22nd October.
Machine mestri, (M. 4,875).	Sink, 70 feet below the 53rd level, Deep Level Main Winze.	XI	A rockburst	Contused swelling of right foot, abrasion of back and spondylitis lumbar region spine.
Handjumper cooly	No. 1 stope below the 44th level S., No. 2 Winze.	XI	A rockburst	Lacerated wounds of right side of back and arm, muscles injured and multiple wounds all over body.
Timber cooly ..	No. 3 stope below the 47th level S., Tennant's Section.	XV	While building a packwall, a plank of a covering above fell on his foot.	Right foot crushed and amputated.
Handjumper cooly	No. 4 stope below the 46th level S., Tennant's Section.	XI	A burst of quartz	Wound over right tendo achilles, tendon partly cut.
Do ..	No. 4 stope below the 46th level S., Tennant's Section.	XIII	Through drilling into a socket containing remnant of a charge of blasting gelatine.	Extensive lacerated wound of left palm, last two fingers blown off, fracture of carpal bones, wounds of both legs and punctured wounds of right hip and wounds of forehead and chin. Died of shock and septicaemia from multiple injuries at 3-40 P.M. on 18th December.
Do ...	Do ..	Do	Do	Wound of forehead, lacerated and peppered wounds of both arms, forearms, chest and abdominal wall; left middle and ring fingers smashed.

RECORD OF FATAL AND SERIOUS ACCIDENTS.

[NON-MINING.]

RECORD OF FATAL

AT MINES WORKING IN THE STATE

1	2	3	4	5	6	7	8
Date of Accident	Registered Number of Accident	Name and Situation of Mine	Time of Accident (counting hours from midnight)	Number of hours worked before Accident	Names and Number of Persons killed (*All males unless otherwise stated*)	Names and Number of Persons injured (*All males unless otherwise stated*)	Reputed Age
Not Known ...	176	The Mysore Gold Mine, Bowringpet Taluk, Kolar District.	...	...	1 Mahadevan ...	...	45
24th August ...	121	The Champion Reef Gold Mine, Bowringpet Taluk, Kolar District.	10	3	...	1 J. Veloo ...	26
9th December ...	186	Do ...	17	8	...	1 Ammakannoo (female).	22
14th October ...	147	The Ooregum Gold Mine, Bowringpet Taluk, Kolar District.	8·35	$1^{7}/_{12}$	1 K Veeran ...	...	15
13th October ...	175	The Balaghat Gold Mine, Bowringpet Taluk, Kolar District.	11-30	4½	1 Bhujanga Naidu.	...	28

AND SERIOUS ACCIDENTS—(*NON-MINING*).

OF MYSORE DURING THE YEAR 1931.

Table 13A.
Supplementary.

9	10	11	12	13
Occupation	Place of Accident	Class of Accident in terms of Table 7	Cause of Accident	Nature of Injury
...	Old Dhoby Tank directly connected with Mill Tank.	...	Asphyxiation due to drowning ...	...
Mason ...	No. 1 Bunglow Motor Shed.	XXIII	Due to a fall of 15 feet from a scaffolding.	Colles fracture of right wrist.
Mason cooly ...	New drain at "C" block (surface).	XXIII	While carrying a granite stone, she tripped and fell, and the stone fell on her leg.	Lacerated wound of lower 3rd of right leg, tendo-achilles partly cut and simple fracture of lower ends of both bones.
Mason boy ...	F. Curtis' Bungalow	XXIII	While standing at the foot of a scaffolding a plank from a height of 11 feet fell on him.	Contused swelling of forehead and contusion of abdomen with probable internal injuries. Died in hospital at 7-45 A.M. on 15th October.
Timberman ..	Plat, 45th level, Deep Level Main Winze.	XIX	While lifting a piece of timber it slipped and fell on his finger.	Wound palm of left middle finger. He died at the hospital of Pyrexia on 3rd November at 7-20 P.M.

APPENDIX I.

NOTES ON THE ADMINISTRATION OF THE WORKMEN'S-COMPENSATION REGULATION, XIV OF 1928, ON THE KOLAR GOLD FIELD FOR THE YEAR 1931-32.

[KINDLY FURNISHED BY MR. A. V. RAMANATHAN, B.A., *Commissioner.*]

The following are the particulars of cases tried by the Commissioner for Workmen's Compensation, Kolar District, from 1st July 1931 to 30th June 1932.—

During the period under report, a total number of 268 cases were filed as against 163 during the preceding year. Of these, 133 were claims relating to fatal accidents and 26 relating to non-fatal accidents and 109 were memoranda of agreements. Twenty-nine cases were contested under section 21 (2) of the Workmen's Compensation Regulation. Of these, 5 cases were compromised, 12 were dismissed, claims were allowed in 6 cases and 6 cases are pending. A total number of 130 claims relating to fatal accidents and 21 claims relating to non-fatal accidents and 107 memoranda of agreement were disposed of. Three claims relating to fatal accidents and 5 claims relating to non-fatal accidents and 2 memoranda of agreement are pending. One memorandum of agreement was recorded after alteration under section 27 (1) (*d*) of the Workmen's Compensation Regulation.

Two claims in respect of diseases alleged to have been contracted in the course of employment were received. Of these, one relating to deafness was dismissed on the ground that no specific injury was proved to which deafness could be held to be solely and directly attributable as required by section 3 (4) of Workmen's Compensation Regulation 1928. The other relating to pulmonary tuberculosis was dismissed on the ground that there was no causal connection between the disease and the alleged accident.

Appeal was preferred to the High Court of Mysore under section 29 (1) of the Regulation in three cases. One preferred by the employer-company was dismissed on the preliminary question of limitation and the other two preferred by the claimants are pending.

The Executive Member, Messrs. John Taylor & Sons' Committee, Ooregaum, on behalf of the Mining Companies deposited a total sum of Rs. 93,546-11-0 in respect of both fatal and non-fatal accidents as against Rs. 43,915-6-0 during the preceding year. Out of the total amount of Rs. 93,546-11-0 deposited, a sum of Rs. 92,226-11-0 was distributed to the claimants including the amounts refunded to the employer under section 8(4) of the Regulation, and a sum of Rs. 1,320 is pending orders of distribution. A total sum of Rs. 2,815 is in deposit in the Bank of Mysore, Ltd., Ooregaum, pending final payment to the parties concerned. During the year under report, a total sum of Rs. 6,742-8-0 was invested in the Government Savings Bank, Fixed and Current Deposits in the Bowringpet Treasury. A sum of Rs. 1,400 was invested in the purchase of 6½ per cent Government of India Treasury Bonds 1935 and a sum of Rs. 945 was invested in the purchase of the Post Office Cash Certificates on behalf of the minors. Out of the total amounts invested, a sum of Rs. 6,867-8-0 was withdrawn and paid to the guardians for purchase of house or lands on behalf of the minors and the balance of Rs. 2,220-0-0 plus the opening balance of Rs. 6,220 at the beginning of the year under report, *i.e.*, a total amount of Rs. 8,440-0-0 is in deposit.

A bill to amend the Workmen's Compensation Act 1923 has been introduced in the Indian Legislative Assembly and the amendment of the Workmen's Compensation Regulation 1928 of Mysore on similar lines, in so far as they are applicable to conditions obtaining in Mysore, is under the contemplation of Government.

APPENDIX II.

ACCIDENTS BY THE USE OF EXPLOSIVES BROUGHT TO THE NOTICE OF THE MINES AND EXPLOSIVES DEPARTMENT FROM 1ST JANUARY TO 31ST DECEMBER 1931.

No.	Date of accident	Nature of explosive	Place of accident	Circumstances of accident so far as ascertained	Number of persons	
					Killed	Injured
1	4th Jan.	Fulminate.	In a hut in Bowringpet Town.	While a Forest Guard was opening the lid of a small tin containing a mixture of "Bellulli Pattas," the mixture exploded seriously injuring both his hands.	...	1
2	13th Jan.	Gunpowder	Thoreyankattoor village, Mysore Taluk.	While grinding together the ingredients of gunpowder, the mixture exploded resulting in serious injuries to two persons to which they succumbed later in hospital.	2	...
3	15th Jan.	Firework composition	Haginaval village, Nanjangud Taluk.	The organizers of a procession were engaged in manufacturing fireworks for display. While mixing together the ingredients of a firework composition, an explosion occurred in which 3 persons were injured.	...	3
4	25th Jan.	Gunpowder	In a well in Hebballi village, Hosdurga Taluk.	A cooly tampered with a misfired hole charged with gunpower and sustained very severe injuries to which he succumbed two days later.	1	...
5	1st Feb.	Do	Shimoga Town ...	A blaster was carrying gunpowder for blasting a well when a spark from the "beedi" which he was smoking at the time fell on the powder and exploded it. He sustained fatal burns all over the body.	1	...
6	14th Feb.	Fulminate	Begur village, Shikarpur Taluk.	By tampering with a packet containing a mixture of potassium chlorate and arsenic sulphide, a beggar sustained serious injuries to his person.	...	1
7	1st Mar.	Firework composition	Nagarangere village, Challakere Taluk.	While screwing up the lid of a vaseline bottle containing a firework composition, an explosion occurred and three persons sustained injuries thereby.	...	3
8	2nd Mar.	Fulminate	Abboor Doddi, Channapatna Taluk.	By pressing a tin containing a mixture of potassium chlorate and arsenic sulphide in his hands, a ryot caused it to explode and sustained injuries thereby.	...	1
9	2nd Mar.	Do	Bellavi village, Tumkur Taluk.	While a merchant was opening the lid of a tin containing some firework composition presumably "Bellulli Pattas" mixture, an explosion occurred and injured him.	...	1
10	7th Mar.	Detonator	Yelahanka, Bangalore Taluk.	A boy tampered with a detonator and sustained injuries to his hands.	...	1
11	7th Mar.	Dynamite	Akkihebbal Bridge Works, Krishnarjpete.	Two coolies deepened a socket containing an unexploded portion of a charge of dynamite and suffered serious injuries in consequence.	...	2
12	8th Mar.	Country gunpowder	Anicut Works near Veera-Vaishnava River, Nelligere, Nagamangala Taluk.	A cooly carelessly threw a lighted match stick after lighting a "beedi" on a tin containing gunpowder and set it ablaze. In the resultant explosion, he and his companion were injured.	...	2
13	10th Mar.	Fireworks	Gundapura village, Malavalli Taluk.	In connection with the annual "Jatra" of the village deity, the villagers arranged for the display of fireworks during a procession. A spark from a lighted firework fell on the main stock of fireworks and set it ablaze. Four persons in the vicinity sustained severe burns, two of whom succumbed to their injuries subsequently.	2	2
				Carried over ...	6	17

APPENDIX II—*contd.*

No.	Date of accident	Nature of explosive	Place of accident	Circumstances of accident so far as ascertained	Number of persons Killed	Number of persons Injured
				Brought forward ...	6	17
14	16th Mar.	Dynamite	Avverahalli village, Koppa Hobli, Mandya Taluk.	By tampering with a misfired hole or socket, a blaster and his assistant sustained very serious injuries. The former died in hospital the next day.	1	1
15	11th April	Gunpowder	Kengaki village, Chamarajnagar Taluk.	While ramming home a charge of gunpowder into a hole with iron implements, an explosion occurred and injured the two operators.	...	2
16	15th April	Do	Gangesandra, Goribidanur Taluk.	During blasting operations in a feeder channel, the blaster loaded a hole with gunpowder by means of an iron rod when the charge exploded, inflicting serious injuries on his person.	...	1
17	18th April	Do	Davangere Town ...	While grinding together the ingredients of gunpowder in a stone mill, an explosion occurred and a woman cooly sustained burns in consequence.	...	1
18	1st May	Do	Kammanahalli, Bangalore Taluk.	When a farmer was manufacturing country gunpowder, it exploded and he sustained injuries thereby.	...	1
19	1st May	Detonator	Hosaholalu village, Heggaddevankote Taluk.	A goldsmith tampered with a detonator and sustained injuries in the resultant explosion.	...	1
20	4th May	Fulminate	Sonnadakoppa village, Shikarpur Taluk,	When a villager was attempting to undo a ball of "Bellulli Pattas" (throwdown cracker) to examine its contents, it exploded and he sustained injuries. He subsequently died in his village, septicaemia supervening the injuries.	1	...
21	8th May	Detonator	Andersonpet, Kolar Gold Field.	Two boys sustained injuries by tampering with a detonator.	...	2
22	8th May	Do	Yellodu village, Gudibanda Sub-Taluk.	A person picked up a detonator on a way side, tampered with it and sustained injuries in consequence.	...	1
23	16th May	Fulminate	Chikkamalalavadi village, Kunigal Taluk.	While mixing together some potassium chlorate and arsenic sulphide, an explosion occurred and a person sustained injuries thereby.	...	1
24	5th June	Gunpowder	New Bangalore Water Works, Thippagondanahalli.	A cooly was hit by a stone ejected during a blast at the Water Works.	...	1
25	10th June	Fulminate	Arsikere Town ...	While handling a tin containing a mixture of potassium chlorate and arsenic sulphide, it fell down and exploded. Four persons sustained injuries in consequence.	...	4
26	12th June	Dynamite	Thadakalur village, Sira Taluk.	During blasting operations in a well, the blaster tampered with a misfired hole and sustained severe injuries in the resultant explosion. He subsequently died in hospital from the effects of his injuries.	1	...
27	15th June	Detonator	Bowringpet Town ...	A boy tampered with a detonator and sustained injuries to his hands, chest and neck.	...	1
28	11th July	Detonator	Tumkur Town ...	A boy picked up a detonator in a street and probed it with a needle when an explosion occurred and injured him seriously.	...	1
29	17th July	Fireworks	Hassan Town ...	During a display of fireworks on the occasion of a Mahomedan feast, a lighted squib struck a person on the leg.	...	1
				Carried over ...	9	36

APPENDIX II.—*contd.*

No.	Date of accident	Nature of explosive	Place of accident	Circumstances of accident so far as ascertained	Number of persons	
					Killed	Injured
				Brought forward ...	9	36
30	25th July.	Fulminate	Mangala village, Chamrajnagar Taluk.	While a "Fakeer" was opening the lid of a bottle containing a mixture of potassium chlorate and arsenic sulphide, the mixture exploded and inflicted serious injuries on his person.	...	1
31	14th Aug.	Do	Chikkahosahalli, Anekal Taluk.	While a woman was grinding together the ingredients of "Bellulli Pattas", the mixture exploded causing her serious injuries.	...	1
32	22nd Aug.	Do	Hebbagodi village, Anekal Taluk.	While a person was opening a bottle containing a mixture of potassium chlorate and arsenic sulphide, it exploded and injured him.	...	1
33	23rd Aug.	Dynamite	In a well, Chamrajnagar Town.	A blasting cooly sustained injuries while withdrawing a charge from a misfired hole.	...	1
34	27th Aug.	Gunpowder	New Bangalore Water Works, Thippagondanahalli.	A cooly sustained injuries by a stone ejected during a blast.	...	1
35	3rd Sept.	Fulminate	Sunnavara village, Anekal Taluk.	By tampering with a packet of "Bellulli Pattas", 2 boys sustained injuries.	...	2
36	11th Sept.	Do	Basavapatna, Arkalgud Taluk.	While mixing together the ingredients of "Bellulli Pattas" there was an explosion and three boys sustained burns thereby. Two of them succumbed to their injuries subsequently.	2	1
37	19th Sept.	Firework Composition	Gollapalli village, Bowringpet Taluk.	While ramming home a charge of some firework composition into an iron tube, the same exploded, the tube striking the manipulator on the chest with fatal consequences.	1	...
38	26th Sept.	Fulminate	Muthakadahalli, Turuvekere Sub-Taluk.	While a person was opening the lid of a small tin containing a mixture of potassium chlorate and arsenic sulphide, it exploded and injured him.	...	1
39	27th Sept.	Dynamite	Koppa village, Maddur Taluk.	A blaster tampered with a misfired hole in the bottom of a well. It exploded causing him fatal injuries. Another person was also injured at the same time.	1	1
40	3rd Oct.	Fulminate	Kodipalli village, Goribidnur Taluk.	A person hit a small paper packet containing a little "Bellulli Pattas" mixture when it exploded and injured him.	...	1
41	4th Oct.	Detonator	Hullahalli, Nanjangud Taluk.	While a goldsmith was scratching a detonator to convert it into a talisman, it exploded and injured him.	...	1
42	8th Oct.	Gunpowder	Chetnahalli, Holalkere Taluk.	While sinking a well, the blaster tampered with a misfired hole containing an unexploded charge of gunpowder. An explosion occurring, the blaster and his assistant sustained injuries.	...	2
43	8th Oct.	Do	Chikkanahalli, Kolar Taluk.	While charging a hole with gunpowder by means of an iron rod and hammer, an explosion was caused which set fire to a small quantity of powder spread out to dry in the vicinity. Three persons in all sustained burns in consequence.	...	3
44	9th Oct.	Do	Chickkapalli, Kolar Taluk.	A stone-dresser was drying gunpowder on a rock and the same took fire due to careless handling and he sustained injuries in consequence.	...	1
45	15th Oct.	Fulminate	Chillengeri village, Kolar Taluk.	When a person was grinding together a mixture of potassium chlorate and arsenic sulphide the same exploded and injured his eyes.	...	1
				Carried over ...	13	55

APPENDIX II.—*concld.*

No.	Date of accident	Nature of explosive	Place of accident	Circumstances of accident so far as ascertained	Number of persons	
					Killed	Injured
				Brought forward ...	13	55
46	5th Nov.	Fulminate.	Gumballi, Yelandoor Taluk.	While a person was preparing small throw-down bombs with "Bellulli Pattas" mixture, an explosion occurred and injured him.	...	1
47	10th Nov.	Firework composition	Kandaka village, Sagar Taluk.	While a boy was opening a small bottle containing a firework composition, it exploded and injured him seriously.	...	1
48	22nd Nov.	Fireworks	Bangalore City ...	A boy thew a bunch of china crackers into an oven and sustained injuries in the resultant explosion.	...	1
49	25th Nov.	Fulminate.	Sidlaghatta ...	A person had exposed to the sun some quantity of manufactured fireworks along with some throwdown crackers. One of the latter is said to have exploded and inflicted injuries on his person.	...	1
50	16th Dec.	Do	Closepet Town ...	While a person was mixing together the ingredients of "Bellulli Pattas" an explosion occurred and injured his face and eyes.	...	1
51	20th Dec.	Do	Kirugavalu village, Malavalli Taluk.	A small earthenware pot containing some "throwdowns" accidentally dropped from the beam of a house and exploded. Three inmates of the house sustained injuries thereby.	...	3
52	22nd Dec.	Gunpowder	New Bangalore Water Works, Thippagondanahalli.	During blasting operations, on a hillside a stone ejected by the blast struck a child in the vicinity causing minor injuries.	...	1
53	23rd Dec.	Fireworks	Hamohalli, Arsikere Taluk.	While a Mahomedan was smoking a "beedi" a spark fell on a quantity of fireworks which he had brought for Shabhan Festival and ignited it. He sustained fatal burns all over the body.	1	...
54	24th Dec.	Fulminate	Kadagondahalli village, Bangalore Taluk.	While grinding together some potassium chlorate and arsenic sulphide, the mixture exploded.	...	1
55	24th Dec.	Firework	Shimoga Town ...	While lighting a firework, a spark from it fell on some crackers which a Mohamedan carried in his shirt pocket and ignited it. He sustained injuries in consequence.	...	1
56	24th Dec.	Do	Seringapatam Town ...	During a display of fireworks, a lighted firework hit the displayer and injured him.	...	1
				Total ...	14	67

SUMMARY.

Explosive	Number of Accidents	Number of persons	
		Killed	Injured
Gunpowder	14	4	16
Nitrate mixture	...	...	...
Nitro-compound	5	3	5
Chlorate mixture	...	.	...
Fulminate	20	3	25
Ammunition	7	...	8
Fireworks	10	4	13
Grand Total ...	56	14	67

APPENDIX III.

DEPARTMENT OF MINES AND EXPLOSIVES.

With reference to notification No. G. 9745—Geol. 69-15-17, dated 18th January 1918, publishing rules to regulate the manufacture, possession, sale, transport and importation of explosives, the following list of "Authorised Explosives" referred to in Rule 4 (3) of the Mysore Explosives Rules, is published for general information :—

LIST OF AUTHORISED EXPLOSIVES.

The following explosives are at present authorised for importation into the Mysore State for general sale :—

CLASS 1.—GUNPOWDER.

The term "gunpowder" means gunpowder ordinarily so called.

GUNPOWDER.

CLASS 2.—NITRATE MIXTURE.

The term "nitrate mixture" means any preparation, other than gunpowder ordinarily so called, formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosive properties, whether sulphur be or be not added to such preparation, and whether such preparation be or be not mechanically mixed with any other non-explosive substance, and includes any explosive containing a perchlorate and not being a chlorate-mixture, fulminate or nitro-compound as defined in Rule 4 of the Mysore Explosives Rules, 1917.

Every blasting explosive in this class, in which nitrate of ammonium, nitrate of sodium or chloride of sodium are used as ingredients, shall be contained in cartridge wrappers or cases (or in five-pound inner packages) made thoroughly water-proof with melted paraffin or other suitable water-proofing material.

BOBBINITE.

CARDOX COMPOSITION.

M Powder
Pranada.
Q Powder.

CLASS 3.—NITRO-COMPOUND.

The term "nitro-compound" means any chemical compound possessed of explosive properties or capable of combining with metals to form an explosive compound, which is produced by the chemical action of nitric acid (whether mixed or not with sulphuric acid) or of a nitrate mixed with sulphuric acid upon any carbonaceous substance, whether such compound is mechanically mixed with other substances or not.

The nitro-compound class has two divisions.

Every blasting explosive in this class, in which nitrate of ammonium, nitrate of sodium or chloride of sodium or Nitroglycol are used as ingredients, shall be contained in cartridge wrappers or cases (or in five-pound inner packages) made thoroughly water-proof with melted paraffin or other suitable water-proofing material.

DIVISION 1.

Division 1 comprises the following explosives and any chemical compound or mechanically mixed preparation which consists either wholly or partly of nitro-glycerine or of some other liquid nitro-compound :—

Amazonite
Brocalite Gelatine
Detonita
Gelignite K. 34 per cent, N. G.
Glycerita
L. G. Gelatine
25 per cent Ligdyn
Ardeer Gelignite
Arkite
Samsonita
Samsonite
A. 2. Monobel
Viking Powder No 1
Viking Powder No. 2
Ballistite
Blasting Gelatine
Cambrite
Chilworth Smokeless Powder No. 2
Nacota Powder
Cordite
Cordite, M. D.
Du pont Dynamite, 75 per cent strength
Dynamit
Dynamite
Dynamite No. 1
Red Star Dynamite, 75 per cent strength
Dynobel No. 2
Dynobel No. 3
Dynobel No. 4
Farmers' Dynamite
Gelatine Dynamite
Gelignite
Monobel No. 1
N. S. Gelatine Dynamite
N. S. Gelignite
Quarry Monobel
Rockite
Stonobel
Victor Powder No. 2

Provided that every explosive in this division shall be of such character and consistency as not to be liable to liquefaction or exudation.

Provided also that an explosive which is required by definition to be issued in water-proof inner packages may be exempted from such requirements by special authority when and so long as the conditions of such authority are observed.

DIVISION 2.

Division 2 comprises the following explosives and any nitro-compound as before defined which is not comprised in Division I:—

Alumatol	Guncotton
Ammonal	Negro Powder No. 2
Amberite No. 2	N. S. Smokeless
Di-nitro-phenol	Picric Acid
Economic Smokeless Sporting Powder	Picric Powder
E. C. Sporting Powder	Roburite No. 4
Eley Smokeless Sporting Powder	Ruby Powder
Empire Powder	Schultze Gunpowder
Ideal Powder	Smokeless Diamond
Light Load Smokeless	Tonite or Cotton Powder
Nobel's Special Powder	Tri-nitro-toluol

CLASS 4.—CHLORATE MIXTURE.

The term "chlorate mixture" means any explosive containing a chlorate.

The chlorate mixture class has two divisions.

Every blasting explosive in this class, in which nitrate of ammonium, nitrate of sodium or chloride of sodium are used as ingredients, shall be contained in cartridge wrappers or cases (or in five-pound inner packages) made thoroughly water-proof with melted paraffin or other suitable water-proofing material.

DIVISION 1.

Division 1 comprises any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

Nil.

Provided that every explosive in this division shall be of such character and consistency as not to be liable to liquefaction or exudation.

DIVISION 2.

Division 2 comprises any chlorate mixture as hereinbefore defined which is not comprised in Division 1.

Nil.

CLASS 5.—FULMINATE.

The term "fulminate" means any chemical compound or mechanical mixture, whether included in the foregoing classes or not, which from its great susceptibility to detonation, is suitable for employment in percussion caps or any other appliances for developing detonation or which from its extreme sensibility to explosion, and from its great instability (that is to say, readiness to undergo decomposition from very slight exciting causes) is especially dangerous.

This class consists of two divisions.

DIVISION 1.

Division 1 comprises such compounds as the fulminates of silver and of mercury, and preparations of those substances such as are used in percussion caps, and any preparation consisting of a mixture of a chlorate with phosphorus or certain descriptions of compounds of phosphorus, with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur, or with a sulphuret, with or without carbonaceous matter.

Nil.

DIVISION 2.

Division 2 comprises such substances as the chloride and the iodide of nitrogen, fulminating gold and silver, diazobenzol, and the nitrate of diazobenzol.

Nil.

CLASS 6.—AMMUNITION.

The term "ammunition" means any explosive of any of the foregoing classes when the same is enclosed in any case or contrivance, or is otherwise adapted or prepared so as to form a cartridge or charge for small arms, cannon or any other weapon, or for blasting or to form any safety or other fuse for blasting or for shells, or to form any tube for firing explosives or to form a percussion cap, detonator, fog-signal, shell-torpedo, war-rocket, or any other contrivance other than a firework.

The term "percussion cap" does not include a detonator.*

The term "detonator" means a capsule or case which is of such strength and construction and contains fulminate in such quantity that the explosion of one capsule or case would communicate the explosion to other like capsules or cases.

The term "safety fuse" means a fuse for blasting which burns and does not explode, and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosive in such quantity that the burning of such fuse will not communicate laterally with other like fuses.

The ammunition class has three divisions.

DIVISION 1.

Nobel's Safety Electric Time Fuses	Safety Cartridges
Percussion Caps	Safety Fuses for blasting
Railway Fog-Signals	Safety Electric Fuses

DIVISION 2.

Division 2 comprises any ammunition as hereinbefore defined which does not contain its own means of ignition, and is not included in Division 1.

Cartridges for Blasting or other like purposes.
Cartridges for Small Arms which are not Safety Cartridges.
Cordeau Bickford.
Electric Fuses.
Electric Primers.
Fuse Lighters.
Instantaneous Fuse.
Tubes for firing Explosives.
Quick Match.

DIVISION 3.

Division 3 comprises any ammunition as hereinbefore defined which contains its own means of ignition, and is not included in Division 1.

Cartridges for small arms which are not Safety Cartridges	Friction Tubes
Detonators	Nobel's Electric Delay Action Detonators
Electric Detonators	Percussion Primers
	Tubes for firing Explosives

CLASS 7.—FIREWORK.

The term "firework" comprises firework composition and manufactured fireworks.

DIVISION 1.—FIREWORK COMPOSITION.

The term "firework composition" means any chemical compound or mechanically mixed preparation of an explosive or inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes of explosives and also any star and any coloured fire composition subject to the proviso to the definition of manufactured fireworks.

Nil.

DIVISION 2.—MANUFACTURED FIREWORKS.

Manufactured fireworks consisting of any explosive of the classes 1, 2, 3, 4 and 6 and any firework composition when such explosive or composition is enclosed in any case or contrivance or is otherwise manufactured so as to form a squib, cracker, including Chinese crackers toy-cap or amorce, serpent, rocket (other than a war-rocket), maroon, lance, wheel, Chinesefire, Roman candle, or other article specially adapted for the production of pyrotechnic effects, or pyrotechnic signals or sound signals.

Provided that a substantially constructed and hermetically closed metal case, containing not more than one pound of coloured fire composition of such a nature as not to be liable to spontaneous ignition, shall be deemed to be a "manufactured firework" and not a "firework composition."

Aluminium Torches	Light Signals
Electric Sparkless	Manufactured Fireworks
Magnesium Torches	Pyrotechnic Matches
Amorces	Rockets
Chinese Crackers	Sparklers

* In consequence of the results of experiments carried out, it has been decided that a percussion cap can only be properly classed as such if it contains less than 0·6 grain, of a composition of the 1st Division of the Fifth (Fulminate) Class of which not more than 25 per cent consists of fulminate of mercury or less than 0·5 grain of any other explosive of the 1st Division of the Fifth (Fulminate) Class; and it has been further decided that percussion caps shall not be classed as such when they contain anvils or have their composition unprotected by tin foil or other suitable substance as under those circumstances they are liable to explode *en masse*.

C. E. SURYANARAYANA RAU,
Chief Inspector of Mines in Mysore.

APPENDIX IV.

EXTRACTS FROM THE REPORT ON THE WORKING OF THE KOLAR GOLD FIELD POLICE FOR THE OFFICIAL YEAR 1931-32.

(By Mr. S. Narayana Rao. M. A., (Hons.), Special Superintendent of Police.)

Strength of the Force.—The sanctioned strength of the permanent Force of the Kolar Gold Field Police during the year was 50 officers and 283 men as against 55 officers and 334 men in the previous year.

The decrease in the strength of the force during the year of two Sub-Inspectors, one Subedar, two Sergeants and 51 Constables was due to the Emergency Reserve which consisted of one Subedar, two Sergeants and 35 men which formed part of the Kolar Gold Field Force having been transferred to the Provincial Reserve Force to work under the Assistant Superintendent of Police of the Provincial Reserve, Bangalore, and one Sub-Inspector and 16 men having been transferred to the Mysore Railway Police under the District Superintendent of Police, Railways and C.I.D., and to the retrenchment of one Sub-Inspector according to orders of Government.

Cost of the Force.—The cost of the force during the year under report was Rs. 99,667-14-4 as against Rs. 1,16,572-14-0 in the previous year. Besides this, an expenditure of Rs. 8,054-5-4 was incurred under contingencies, travelling allowance and other heads as against Rs. 8,013-1-0 in the previous year.

State of Crime.—The total number of cognizable cases reported and referred during the year was 311 as against 339 in the preceding year.

Property lost and Recovered.—During the year under report property to the extent of Rs. 10,431-1-0 was reported to have been lost in 201 true cases and property to the extent of Rs. 6,727-3-10 in 175 cases was recovered giving a percentage of 64·49 as against 58·5 per cent in the previous year.

Staff of the Detective Department.—The staff which consisted of one Assistant Superintendent of Police, two Sub-Inspectors, one Head Constable, two Sergeants and eight constables, was reduced to one Inspector, one Sub-Inspector, one Hea dConstable, four daffedars and four constables as a measure of retrenchment. The department is being maintained by annual contributions by Messrs. John Taylor & Sons' Committee.

Summary of work turned out by the detective Staff.—The total number of cases under the Mysore Mines Regulation dealt with by the staff during the year was 33 as against 35 in the preceding year and the total value of the property recovered was Rs. 3,232-15-0 as against Rs. 894-1-6 in the previous year. Out of 33 cases put up, 26 ended in conviction, six were pending trial and one case was 'B' Sheeted.

General.—The relationship between the Watch Establishment of the Kolar Gold Field and the Police continued to be cordial and satisfactory.

APPENDIX V.

EXTRACTS FROM THE ADMINISTRATION REPORT OF THE KOLAR GOLD FIELD SANITARY BOARD FOR THE YEAR 1931-32.

(By Mr. A. V. Ramanathan, B. A., President.)

Constitution of the Board.—There was no change in the constitution of the Board during the year under report. The Board consisted of 18 members, seven *ex officio* and 11 non-official members. Of the non-official members, seven were nominated by the Kolar Gold Field Mining Board and the nominations were approved by Government. One member was nominated by Government to represent Village Panchayets of the villages comprised in the Kolar Gold Field Sanitary Board area other than Robertsonpet and Andersonpet.

Two members were elected from among the rate payers of Robertsonpet and one from Andersonpet.

New Bye-Laws and Rules.—The Government have empowered the Board to prescribe Bye-Laws, with the previous sanction of Government for the regulation and inspection of hotels, restaurants, eating houses and sweetmeat shops in the area under their authority.

Government have approved of the amendments to the Bye-laws regarding the proper supervision and management of bakeries and aerated water factories in the Kolar Gold Field area.

The newly compiled Account Rules were approved by the Board and the same forwarded to the Comptroller in Mysore for his remarks.

Fresh Imposts.—There were no fresh imposts during the year under report.

Public Health, Vital statistics and Epidemics.—The Kolar Gold Field was free from Cholera during the year under report.

The figures under Plague and Small-pox are given below :—

	1931-32		1930-31	
	Attacks	Deaths	Attacks	Deaths
Plague	107	63	81	40
Small-pox	29	1	42	9

The epidemic was brought under control by a vigorous inoculation and vaccination campaign.

Vaccinations.—There were 5,759 vaccinations against 10,241 of the previous year. Of these, 3,087 were primary and 2,672 re-vaccinations, the number successful being 2,681 or 86·85 per cent among the former and 1,144 or 43·20 per cent among the latter.

Births and Deaths.—Three thousand, four hundred and ninety-four births and 2,504 deaths were registered during the year under report as against 2,990 births and 2,245 deaths in the previous year.

Infant mortality.—Six hundred and fifty-three deaths among infants under one year of age were reported during the year under report as against 584 deaths in the previous year, giving a death-rate of 186·89 per 1,000 births as against 195·32 of the previous year.

Water Supply.—There was a sufficient supply of water from Bethamangala filters to the Mines and Robertsonpet.

Avenue Trees and Parks.—The avenue trees in the Kolar Gold Field Sanitary Board area maintained at the cost of the Board are in a fairly good condition.

The King George Hall Park and the Silver Jubilee Park at Robertsonpet were maintained in an efficient manner.

Principal measures sanctioned during the year.—During the year under report the Sanitary Board, functioning as Local Educational Authority under the Mysore Elementary Education Regulation X of 1930, has been authorised by Government to levy an Education Cess in the Kolar Gold Field Sanitary Board area at half an anna in the rupee on all items of State Revenue on which local cess is levied under section 11 of the said Regulation.

Schemes submitted to Government and under consideration.—During the year, the following schemes were under the active consideration of the Board :—

(1) Proposals for bringing Sonnakuppam and Nachakapalli villages under the direct administration of the Board.

(2) Proposals to bring, likewise, under the Board's administration Oorgaum, Masikam and Andersonpet villages.

(3) Proposals to levy shop tax on shops and other places of business owned by private individuals in the Mining area.

(4) Proposals to form a new road between Lakshmisagara and Kempapura villages in the first instance at a cost of about Rs. 3,000.

(5) Proposals to give water tap connections to Andersonpet at a cost of Rs. 13,670. The estimate has been submitted to Government for sanctioning a grant of half the cost of the estimate.

Finance.—The finances of the Board are as under :—

		Actuals of past year 1930-31 Rs.	Budget 1931-32 Rs.	Actuals for the year of report 1931-32 Rs.
Receipts	...	112,052	97,560	133,356
Expenditure	...	114,163	99,576	134,067

General.—As usual, the Chief Medical and Sanitary Officer, Kolar Gold Field, the Superintendents of the Mines, the Executive Member, Messrs. John Taylor & Sons' Committee and other non-official members of the Board evinced keen interest in the affairs of the Board and heartily co-operated in the administration of the Board.

REPORTS OF THE CHIEF INSPECTOR OF MINES IN MYSORE.

Containing Statistical Tables relating to Capital, Machinery and Plant.

Work done and number of persons employed. Production and cost, accidents and mortality.

A few notes and reports on items of interest are mentioned in the following list :—

Year 1898.—Total gold production to date, treatment of ore. Classification of accidents.

Year 1899.—Minor Economic products, classification of accidents, Air-blast—Plague on the Kolar Gold Field.

Appendix—Note on the Geology of the Kolar Schists and surrounding rocks.

Map of the Kolar Schist Belt—Plate I.

Map of the Kolar Gold Field—Plate II.

Year 1900.—Labour, wages and costs. The Cauvery Falls Power Scheme.

Year 1901.—Water-supply for the Kolar Gold Field. Report on the Woolagiri and Amble Mining Blocks, Mysore District, with map and sections. Report on the Ajjampur Block, Kadur District, with map and sections. Note on the New Town (Robertsonpet), Kolar Gold Field, by F. E. C. Carr, Esq., Deputy Commissioner.

Year 1902 *to June* 1903.—Tetanus on the Kolar Gold Field with statistics.

Mine signalling with diagrams.

Air-blasts and quakes: general report with sketches.

Year 1903-04.—Working costs in the Kolar Mines. Note on Milling and Cyanide Practice on the Kolar Field. The Cauvery Power supply. The Kolar Mines Power Station.

Year 1904-05.—General progress notes. East Betrayaswami Block, Kolar District. Bellara Block, Tumkur District.

Year 1905-06.—General Progress Notes. Fire at the Nundydroog Mine.

Year 1906-07.—Note on the Bellara, Javanhalli and other gold blocks in the Tumkur and Chitaldrug Districts on the Honnehatti, Tambadihalli, Jalagargundi, Nandi, Sakrebyle, Devrukal and other gold blocks in the Kadur and Shimoga Districts. Reports on the Woolagiri Mine and the Hunjankere Block, Mysore District. The Anantapur Gold Field. Manganese Prospecting Blocks. Chrome Ores of the Hassan and Mysore Districts.

Year 1907-08.—Reports on Shaws' Block and Ahmed's Block, Kolar District. Further Notes on Prospecting Blocks in various districts.

Year 1908-09.—Fire at the Nundydroog Mine. Air-blast in the New Circular Shaft, Champion Reef, with sketch of the Sinking Frame and Protective Shield.

Year 1909-10.—The Kolar Mines Power Station. Air-blast, Champion Reef. Fracture of winding rope.

Year 1910-11.—Notes on Air-blasts and Quakes.

Year 1911-12.—Report on the Manighatta Block, Kolar District, with plans.

Progress in ore treatment on the Kolar Field. Proposed schemes for treatment of tailings and slimes.

Report on Seismographs for recording Air-blasts.

Year 1912-13.—Notes on the Siddarhalli, Nandi, Woolagiri and other Gold Mining Blocks.

Notes on the Holmes', Python, Chattanhalli, Sigimatti, Markande, Tippur and Shankaragudda Manganese Blocks in the Shimoga District.

Year 1913-14.—Progress notes, Kolar District. The Siddarhalli and Jalagargundi Mines, etc., Kadur District.

Prospecting work at Kudrikonda, Palavanhalli and Honnali, Shimoga District, alluvial washings at Saulanga and on the Thungabhadra river. Manganese, Chrome, Magnesite, Iron Ore, Mica, Copper, Asbestos and Corundum. Notes on Air-blasts, Meteorology and Seismology on the Kolar Gold Field.

Report on the Edgar's Shaft Cage accident, Mysore Mine.

Year 1914.—Progress notes, Kolar District. Notes on the Kumsi and Shankaragudda Manganese Blocks in the Shimoga District, Chrome, Magnesite, Iron ore, Mica, Copper, Asbestos, Corundum, Columbite and Clay. Notes on accidents—Air-blasts, Meteorology and Seismology on the Kolar Gold Field.

Year 1915-16.—Progress notes, Kolar District. Notes on Manganese, Chrome, Magnesite, Mica, Asbestos, Antimony and Corundum. Notes on accidents, Meteorology and Seismology on the Kolar Gold Field.

Year 1916-17.—Progress notes, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Antimony, Corundum, Galena, Kaolin or China Clay, Potstone and Ochres. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field.

Year 1917-18.—Progress notes, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Antimony, Corundum, Galena, Kaolin, Potstone and Ochres. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field.

Year 1918-19.—Progress notes, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Antimony, Corundum, Galena, Kaolin, Potstone, Ochres, Pyrites and Copper. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Sketch describing the method of Rill Stoping showing the various stages.

Year 1919-20.—Progress notes, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Antimony, Corundum, Potstone, Kaolin, Ochres, Pyrites, Limestone and Galena. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field.

Year 1920-21.—Progress notes, Kolar District. Notes on Manganese, Chrome Ore, Magnesite, Asbestos, Mica, Soapstone, Kaolin, Ochres, Limestone, Antimony, Corundum and Galena. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field.

Year 1921-22.—Progress notes, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Kaolin or China Clay, Ochres, Corundum, Limestone, Copper, Slate and Graphite. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field.

Year 1922-23.—Progress notes, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Kaolin or China Clay, Ochres, Corundum, Limestone, Copper, Slate and Graphite. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises Accidents from explosives.

Year 1923-24.—Notes from mines, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Kaolin or China Clay, Soapstone, Limestone, Corundum and Ochres. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives.

Year 1924-25.—Notes from mines, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Kaolin or China Clay, Soapstone, Fire Clay, Limestone and Dolomite and Corundum. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives.

Year 1925-26.—Notes from mines, Kolar District. Notes on Manganese, Chrome, Magnesite, Asbestos, Mica, Kaolin or China Clay, Soapstone, Limestone (Manganiferous), Corundum, Iron ore and Limestone. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives.

Year 1926-27.—Notes from mines, Kolar District. Notes on Manganese, Chromite, Magnesite, Asbestos, Mica, Corundum, Green Quartzite, Kaolin or China Clay, Limestone (Manganiferous), Soapstone, Fuller's Earth, Iron ore and Limestone. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives.

Year 1927-28.—Notes on mines. Notes on Manganese, Chromite, Magnesite, Kaolin or China Clay, Soapstone and Green Quartzite. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives.

Year 1928-29.—Notes on mines. Notes on Manganese, Chromite, Copper, Kaolin or China Clay, Soapstone and Asbestos. Notes on accidents. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives.

Year 1929-30.—Notes on mines. Notes on Manganese, Chromite, Magnesite, Kaolin or China Clay, Soapstone and Graphite. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives.

Year 1930-31.—Notes on mines. Notes on Manganese, Chromite, Magnesite, Kaolin or China Clay, Soapstone, Kyanite, Staurolite and Garnet. Meteorology and Seismology on the Kolar Gold Field. Explosives Section.—Inspection of explosives, magazines and premises. Accidents from explosives. Fire at Nundydroog Mine. Charts of Gold Production, Value in Sterling, Royalty, Tonnages Crushed, Fatal and Serious Accidents and Base Minerals Production from beginning of operations.

The price of each Report is two rupees.

REPORTS OF THE CHIEF INSPECTOR OF EXPLOSIVES IN MYSORE.

Published annually from the year 1901 to 1921 inclusive. *Price eight annas each.* The report for 1901 contains standard plans of Magazines and Lightning Conductor.

Explosives Section (Notes) for the years 1922-23 to 1930-31 are incorporated in the annual reports of the Chief Inspector of Mines in Mysore.

W D—680—GPB—120—30-11-32